FIG. 1A

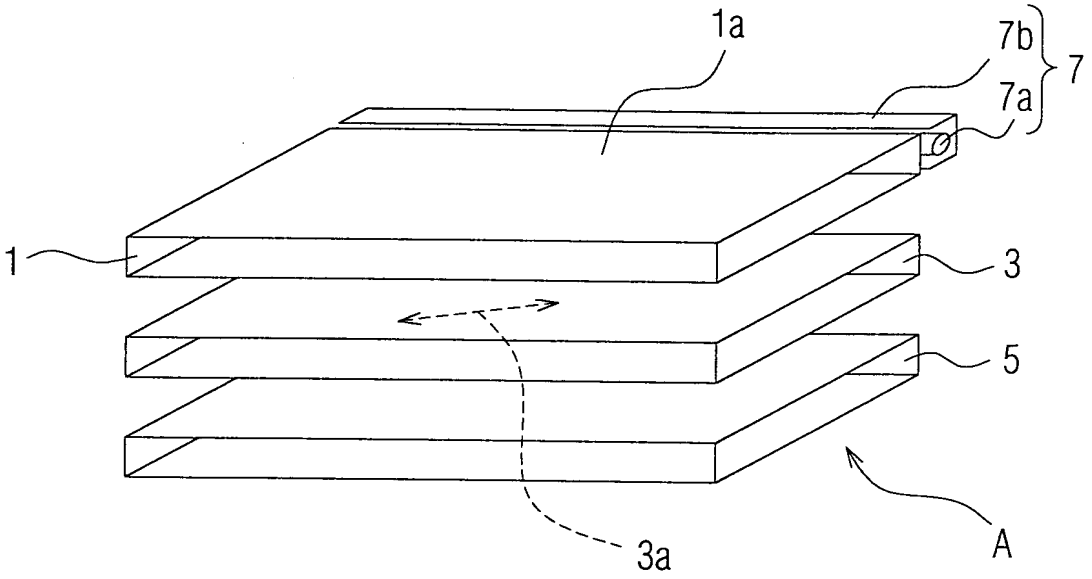

1a
7b
7a
7
1
3
5
3a
A

FIG. 1B

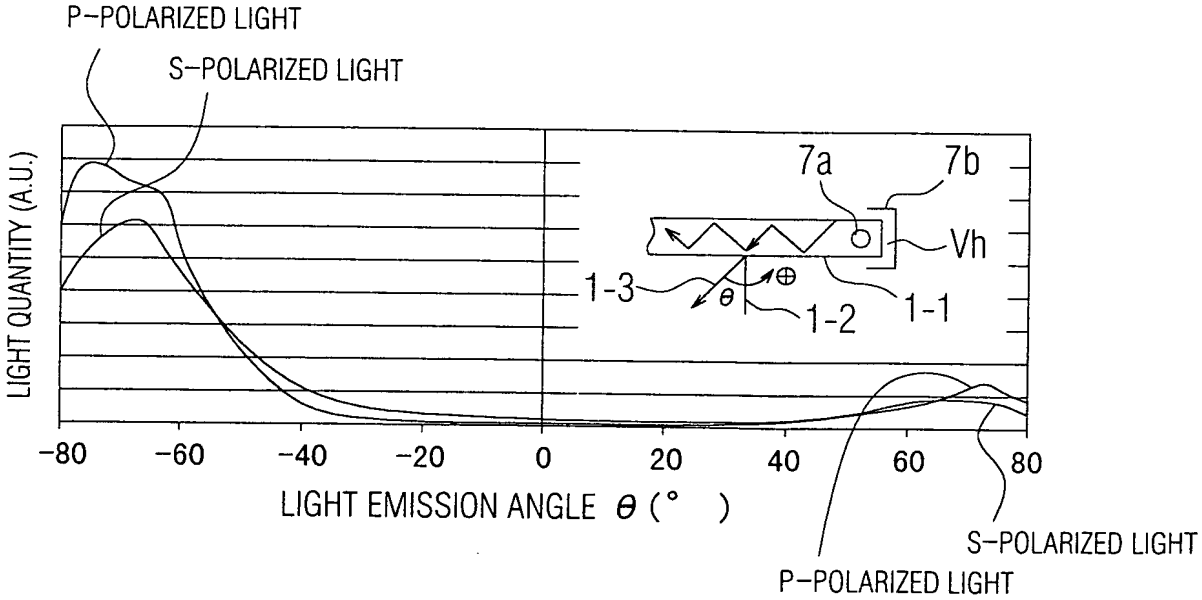

P-POLARIZED LIGHT
S-POLARIZED LIGHT
LIGHT QUANTITY (A.U.)
7a
7b
Vh
1-3
θ
1-2
1-1
-80
-60
-40
-20
0
20
40
60
80
LIGHT EMISSION ANGLE θ (°)
S-POLARIZED LIGHT
P-POLARIZED LIGHT

FIG. 2A

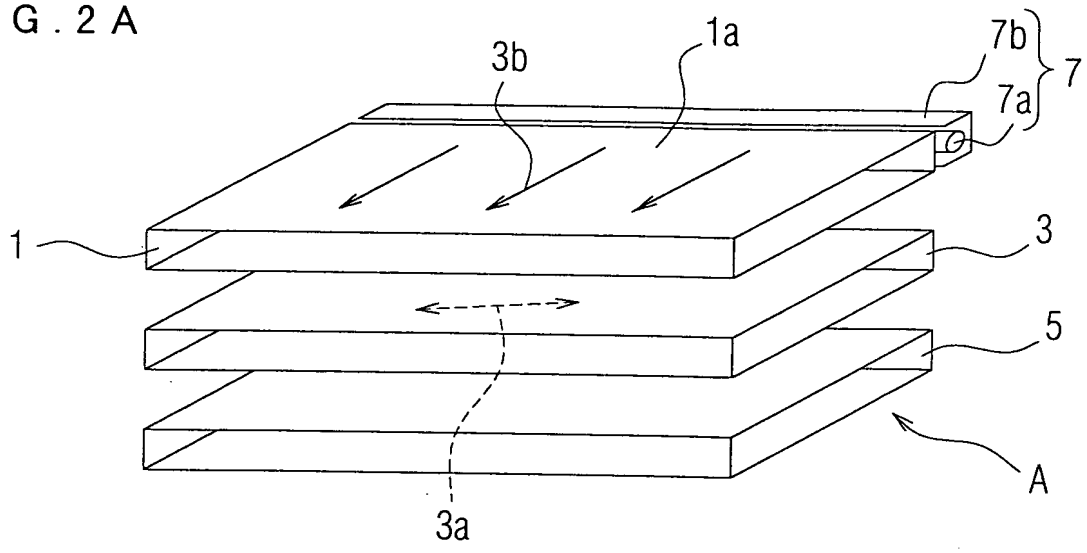


FIG. 2B

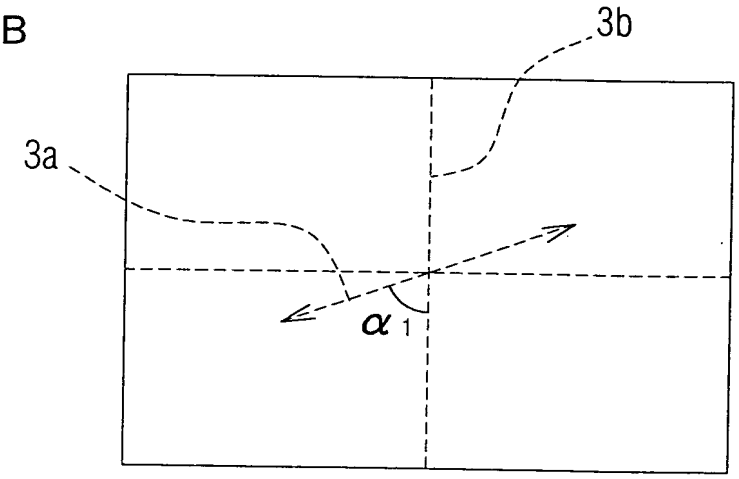


FIG. 2C

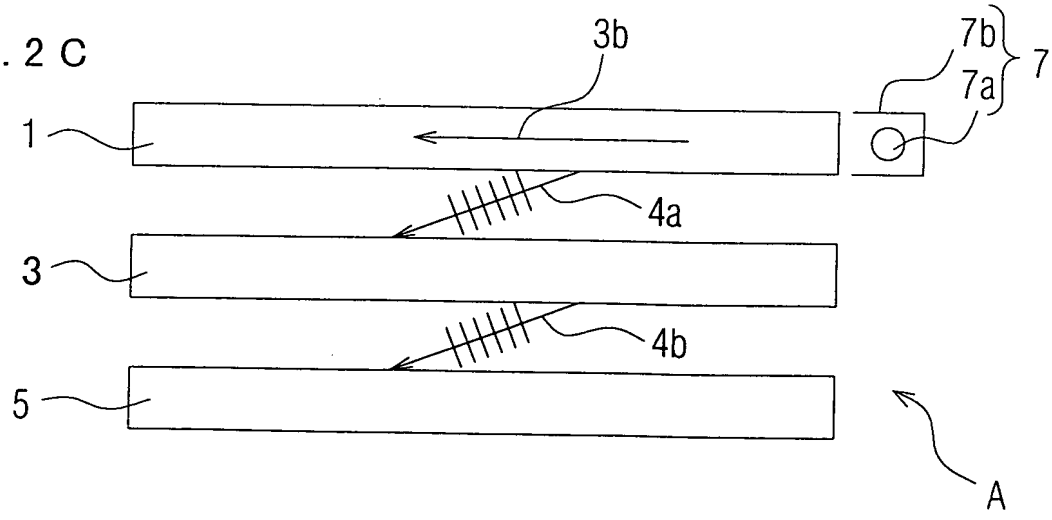


FIG. 3

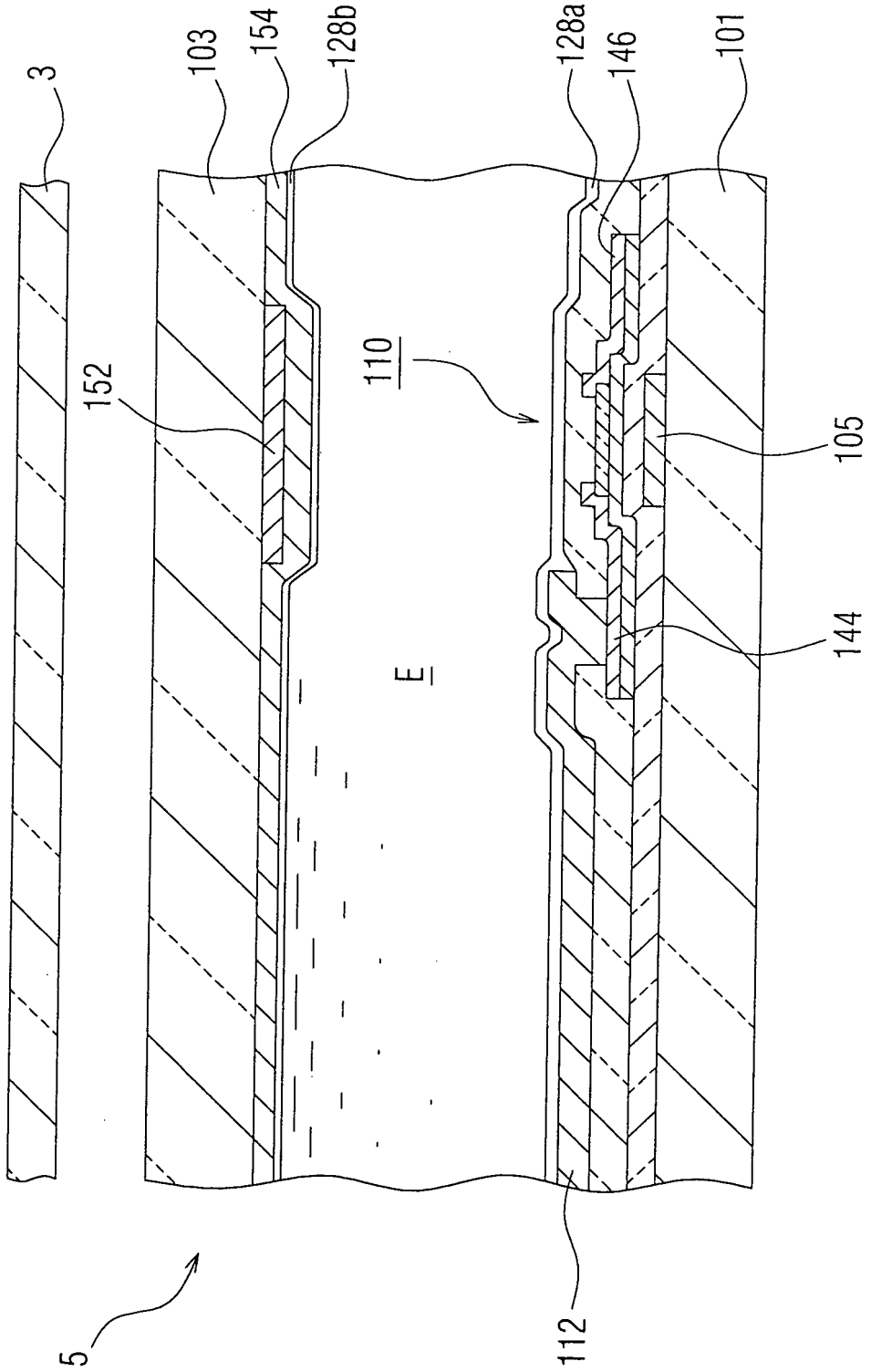


FIG. 4A

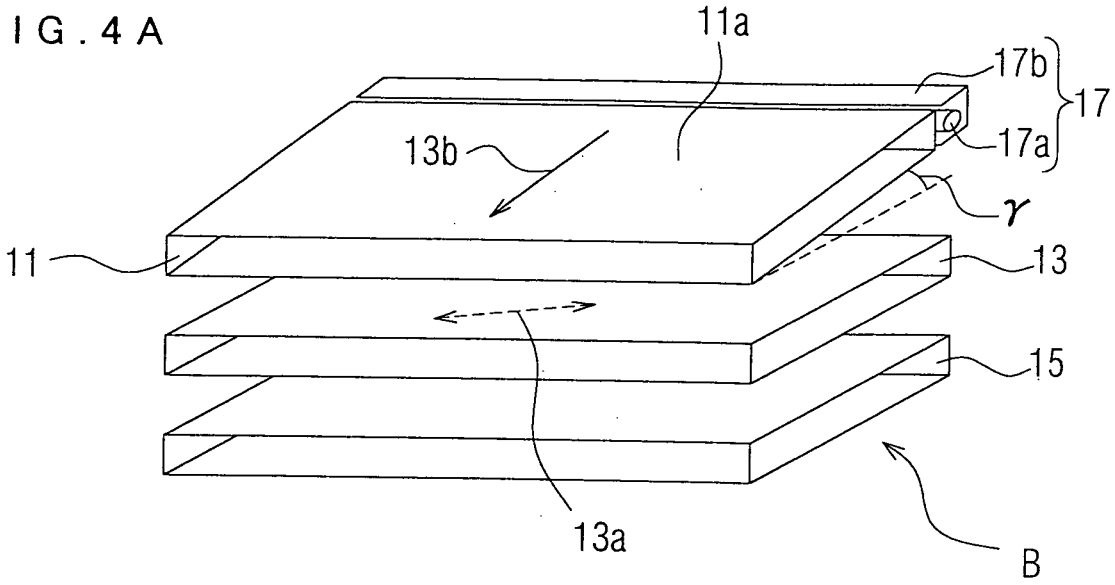


FIG. 4B

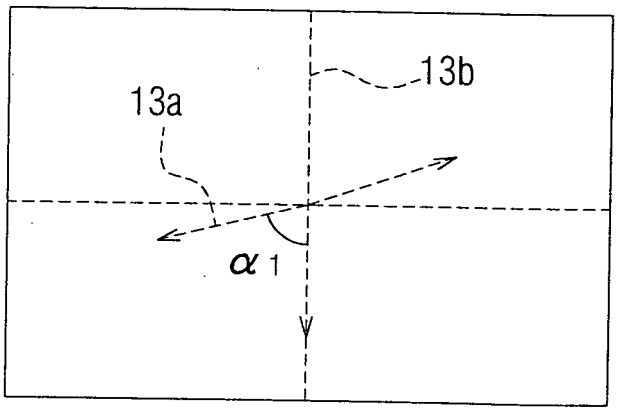


FIG. 4C

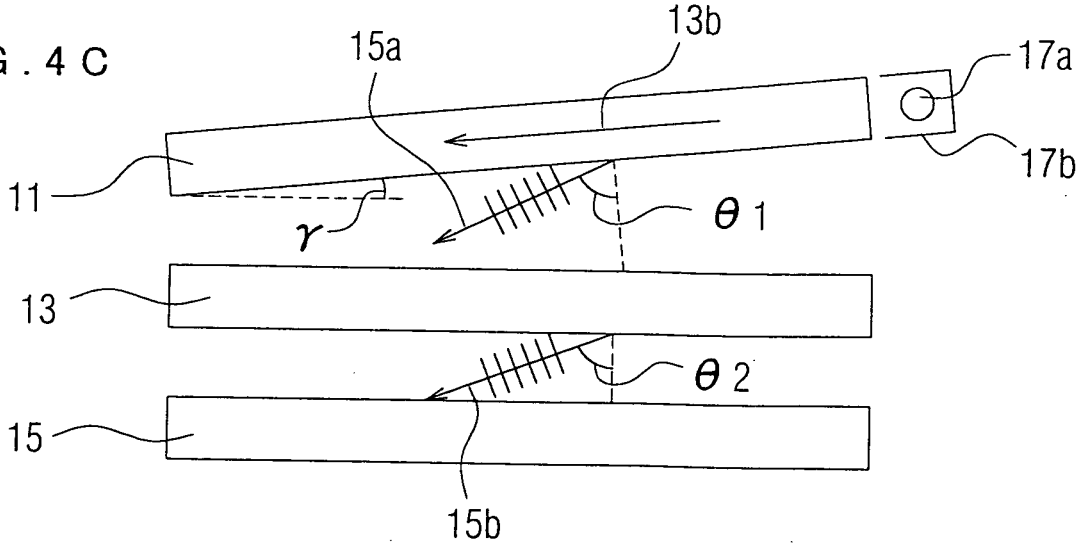
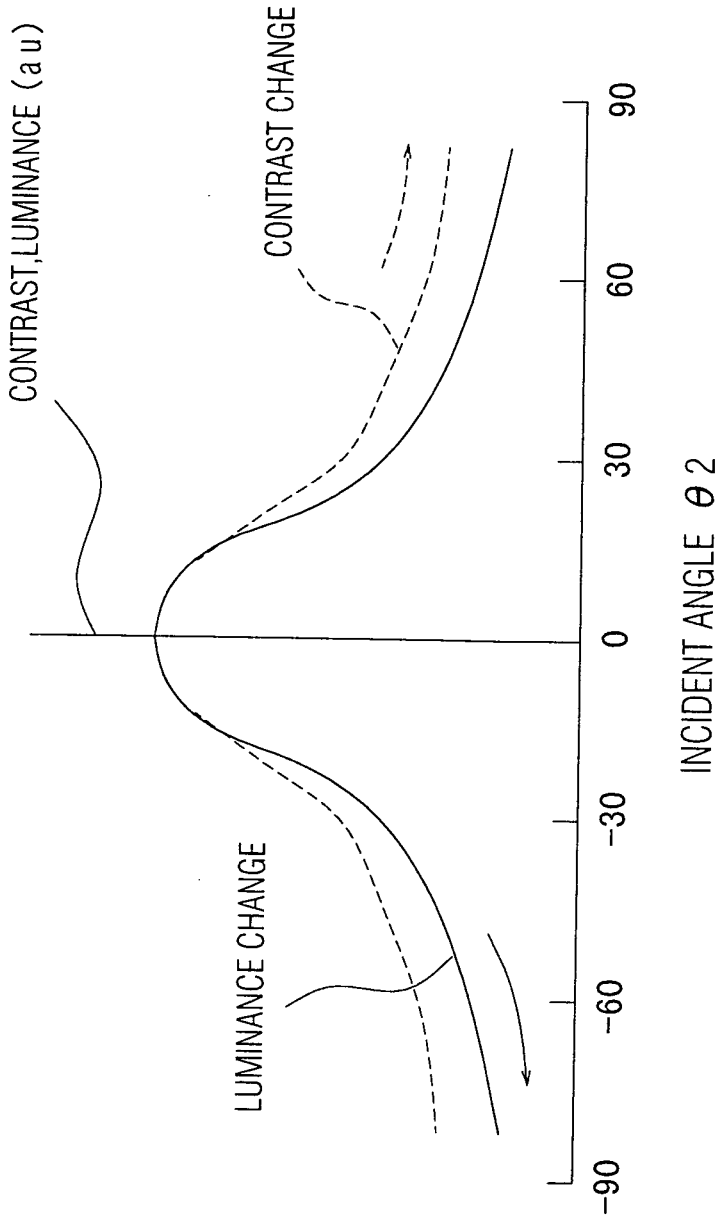


FIG. 5


CONTRAST,LUMINANCE (a u)
CONTRAST CHANGE
LUMINANCE CHANGE
90
60
30
0
-30
-60
-90
INCIDENT ANGLE θ2

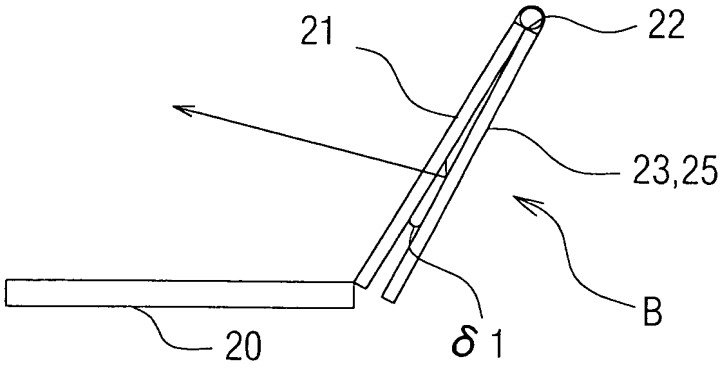


FIG. 6A

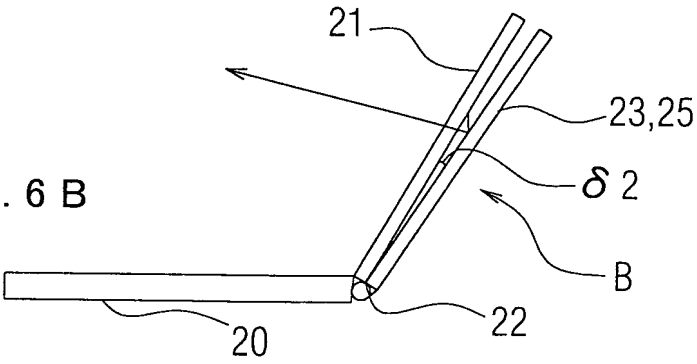


FIG. 6B

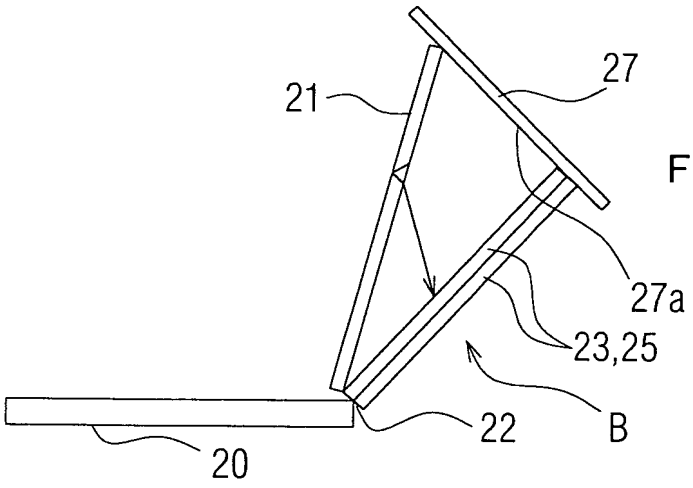


FIG. 6C

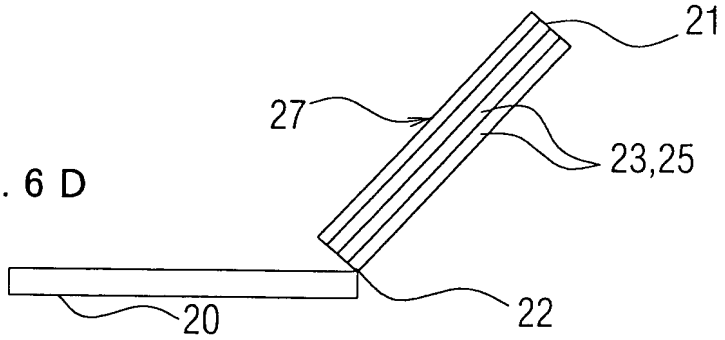


FIG. 6D

FIG. 6E

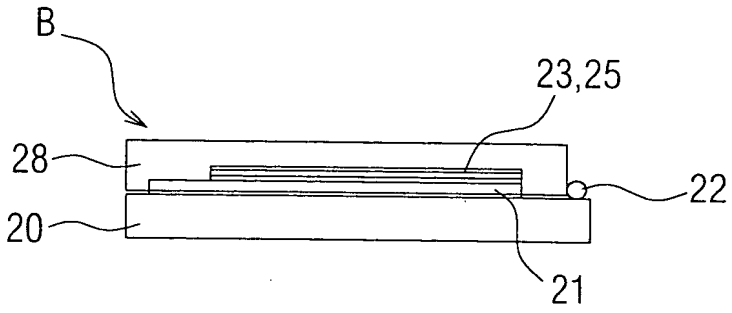


FIG. 6F

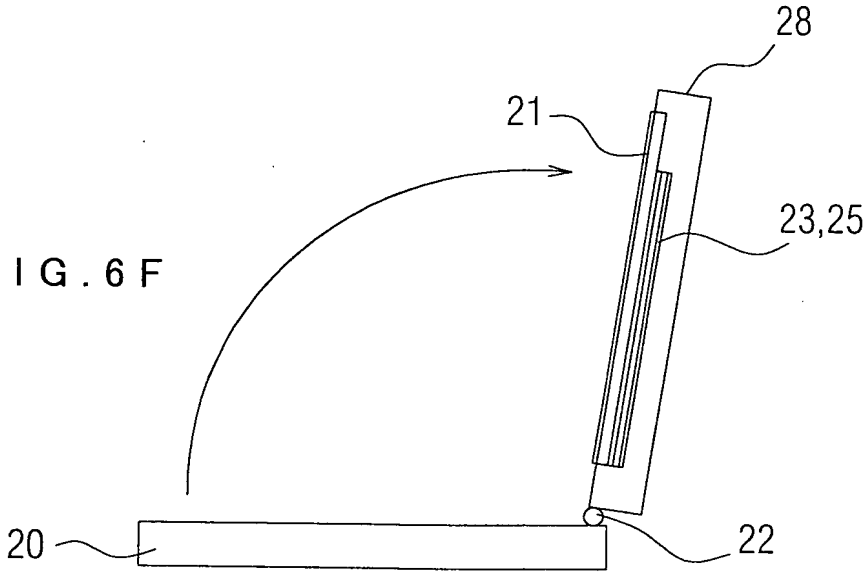


FIG. 6G

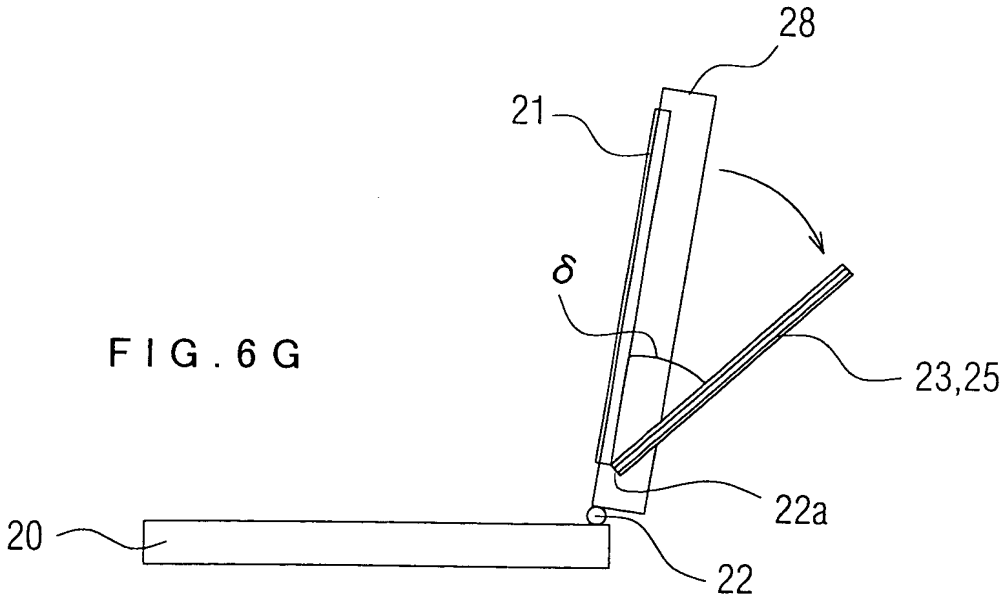


FIG. 7A

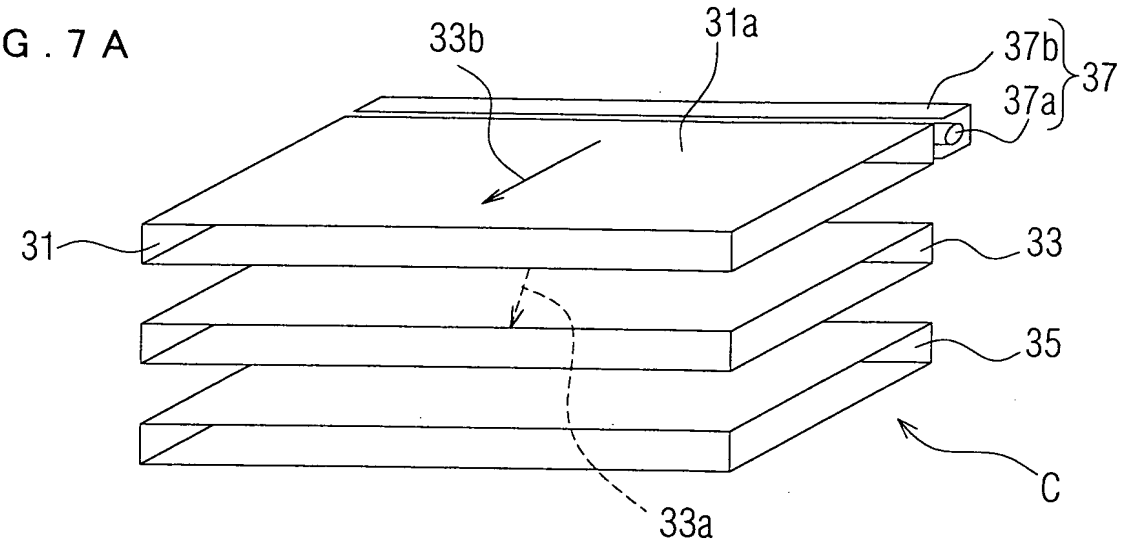


FIG. 7B

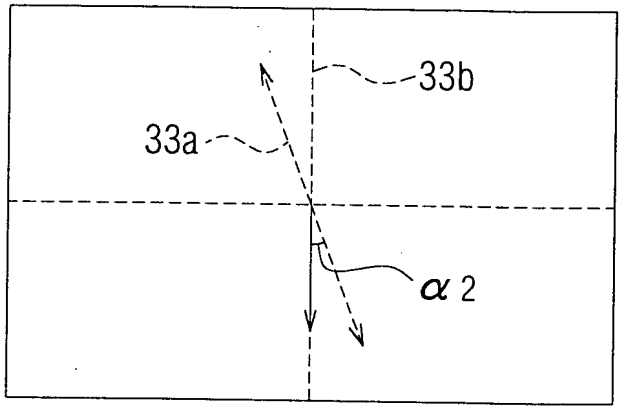


FIG. 7C

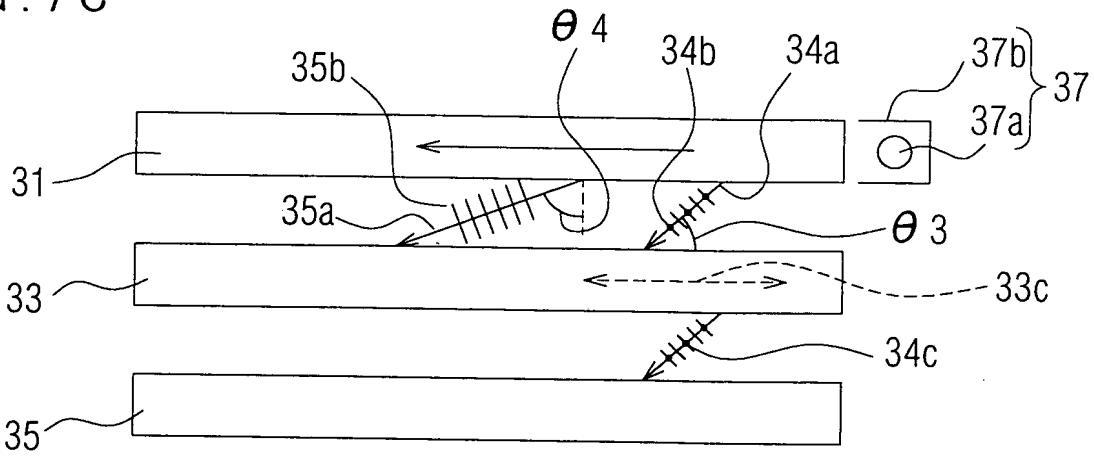


FIG. 8A

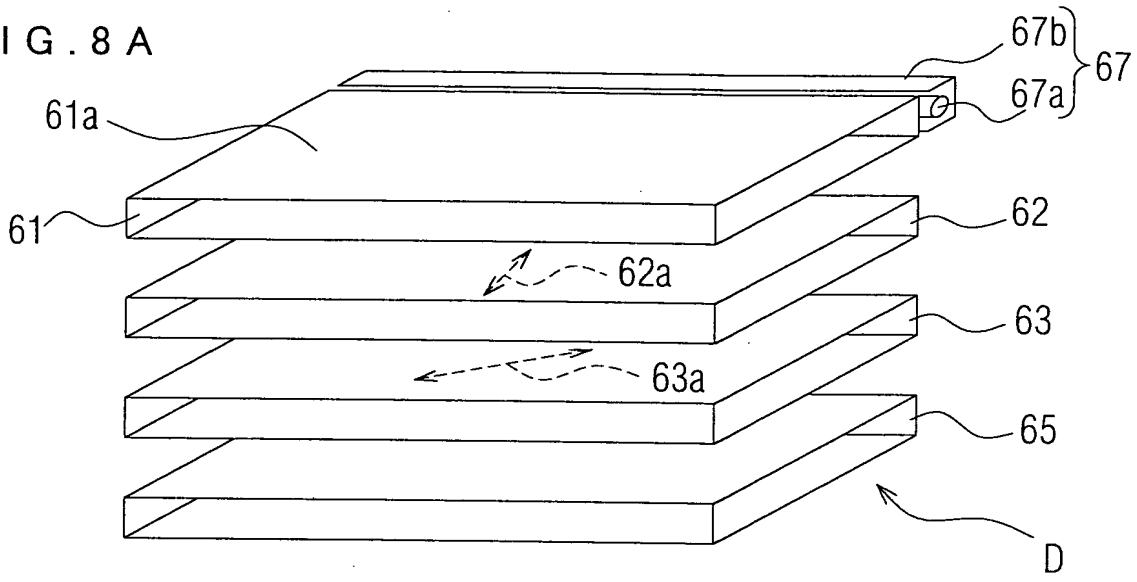


FIG. 8B

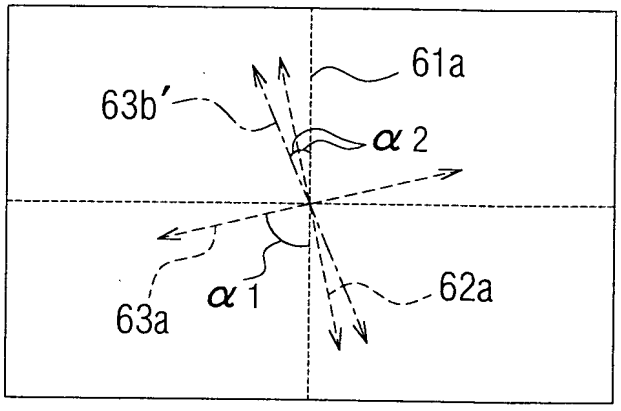


FIG. 8C

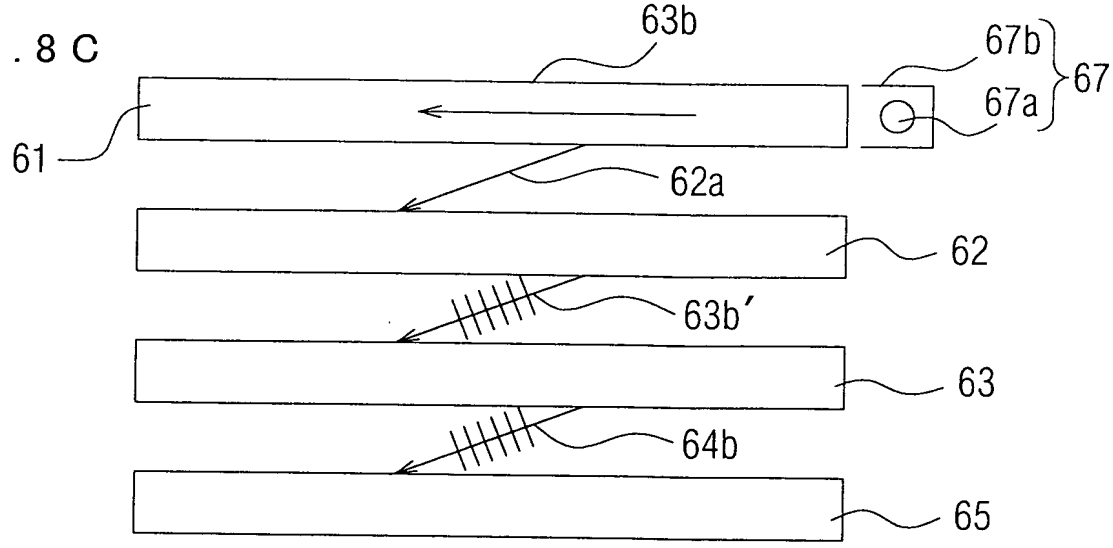


FIG. 9

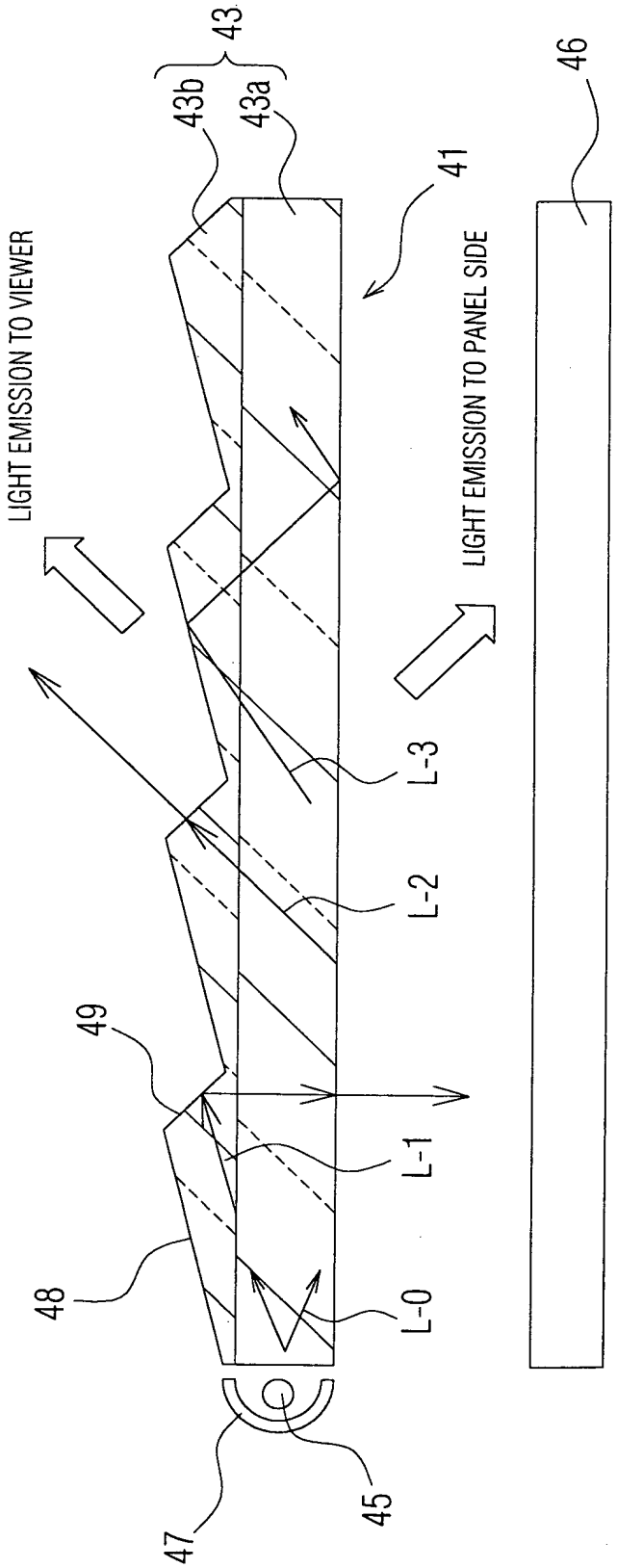

43
43b
43a
46
41
LIGHT EMISSION TO VIEWER
LIGHT EMISSION TO PANEL SIDE
L-3
L-2
49
L-1
48
L-0
47
45

FIG. 10

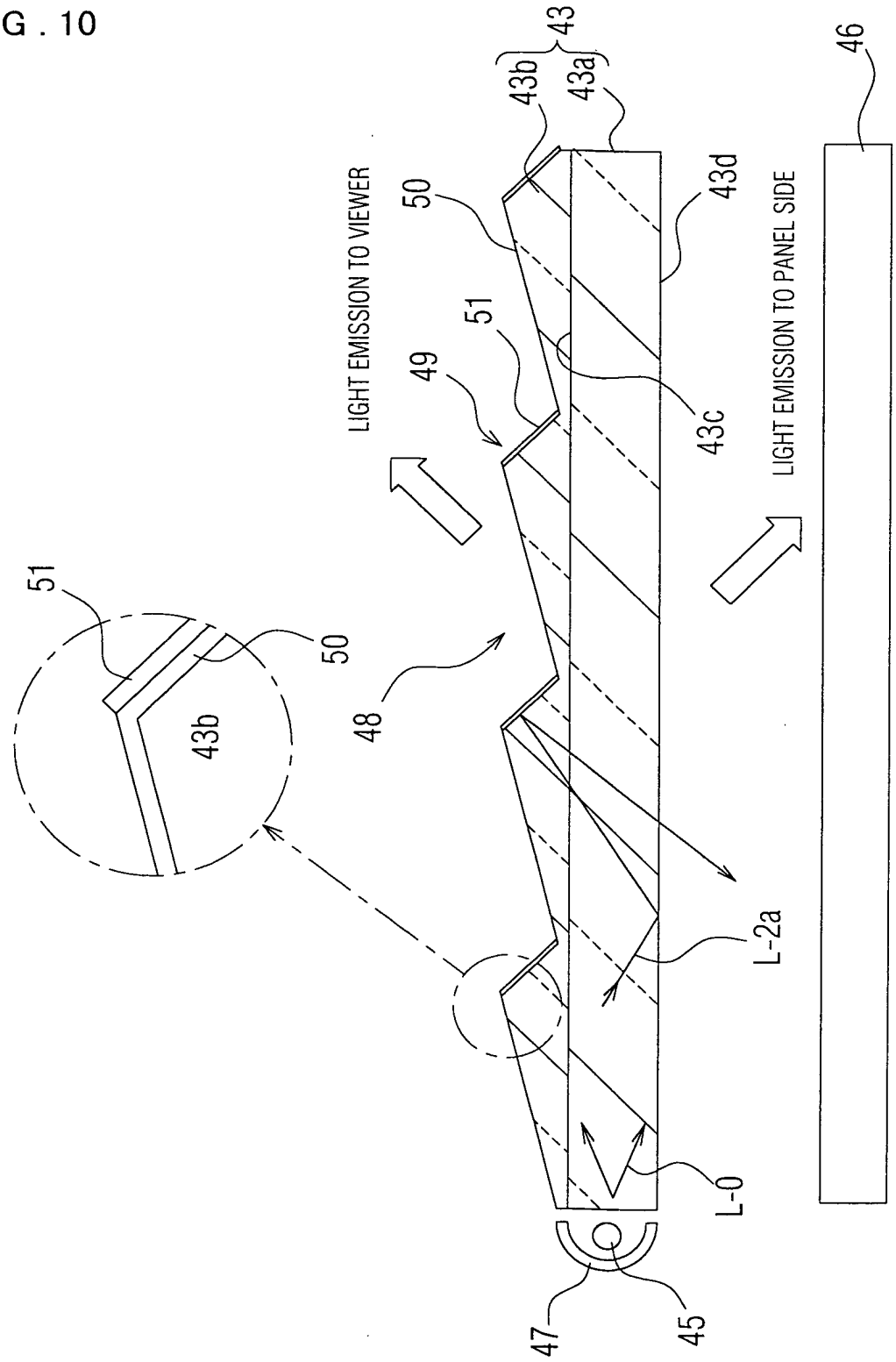

43
43b
43a
46
50
43d
LIGHT EMISSION TO VIEWER
LIGHT EMISSION TO PANEL SIDE
51
49
43c
51
50
48
43b
L-2a
L-0
47
45

FIG. 11

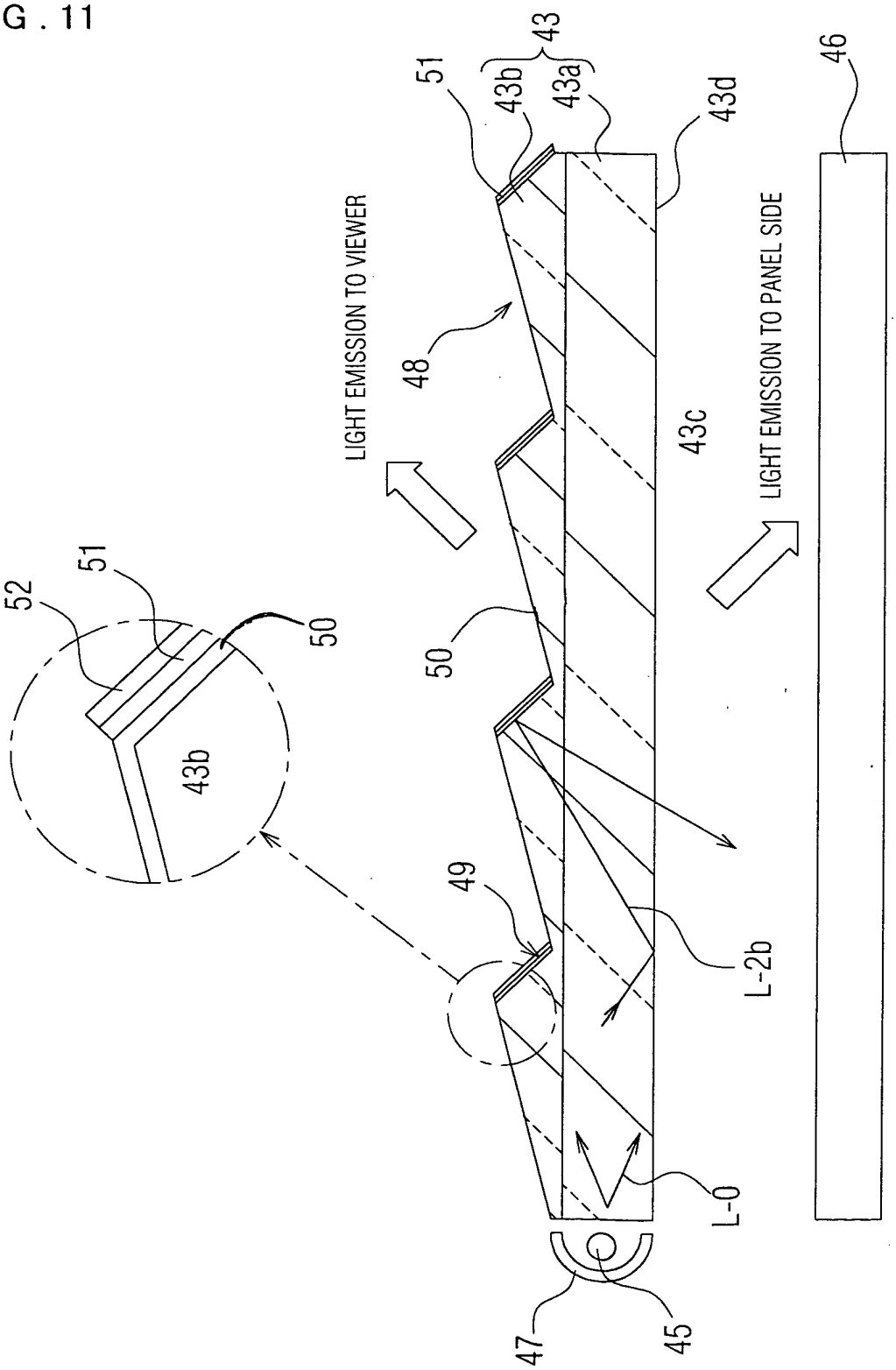

LIGHT EMISSION TO VIEWER
LIGHT EMISSION TO PANEL SIDE
43
43a
43b
43c
43d
46
51
48
50
52
49
L-2b
L-0
47
45

FIG. 12

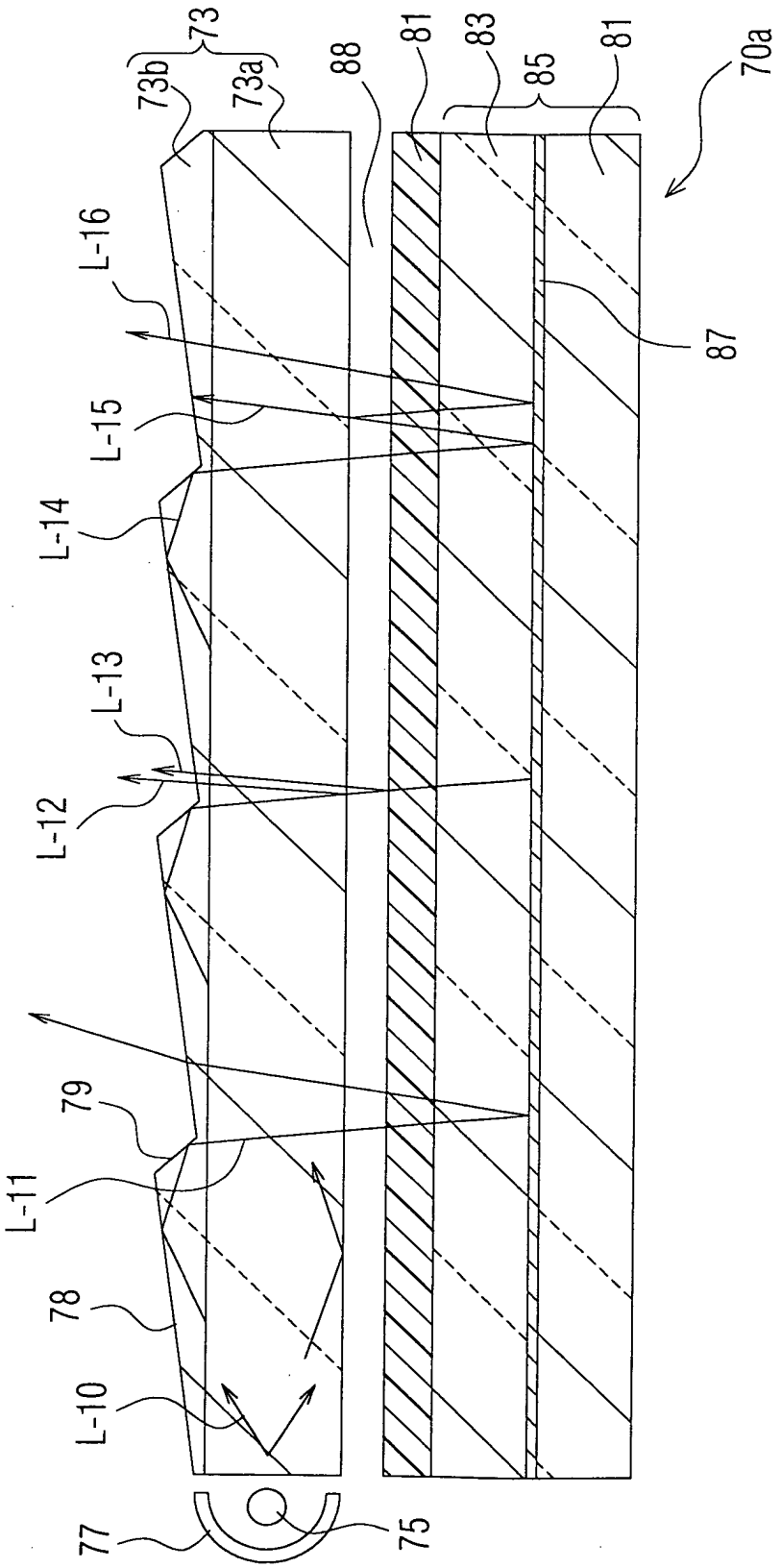

73
73b
73a
88
81
83
85
81
70a
L-16
87
L-15
L-14
L-13
L-12
79
L-11
78
L-10
77
75

FIG. 13

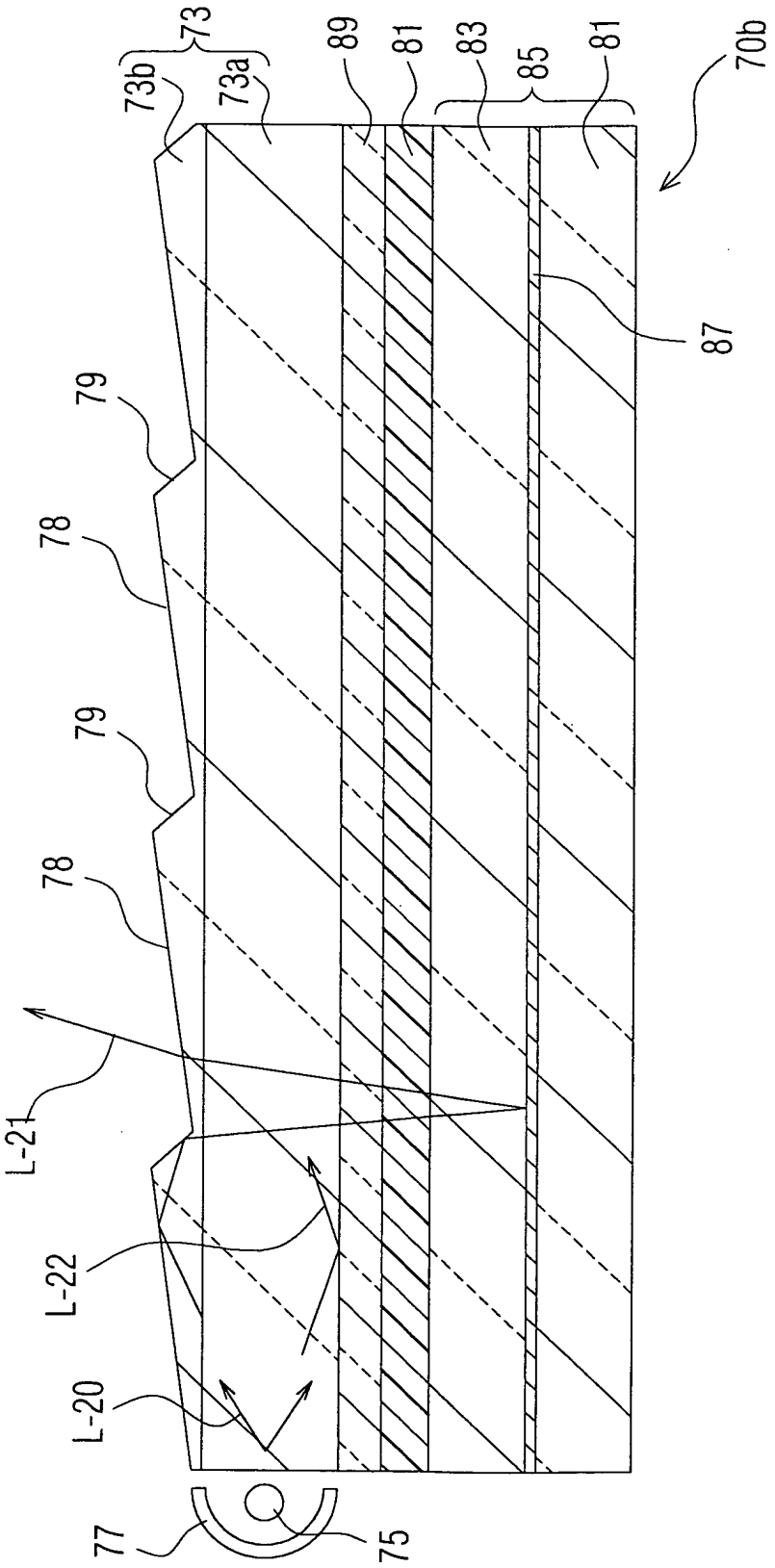


FIG. 14

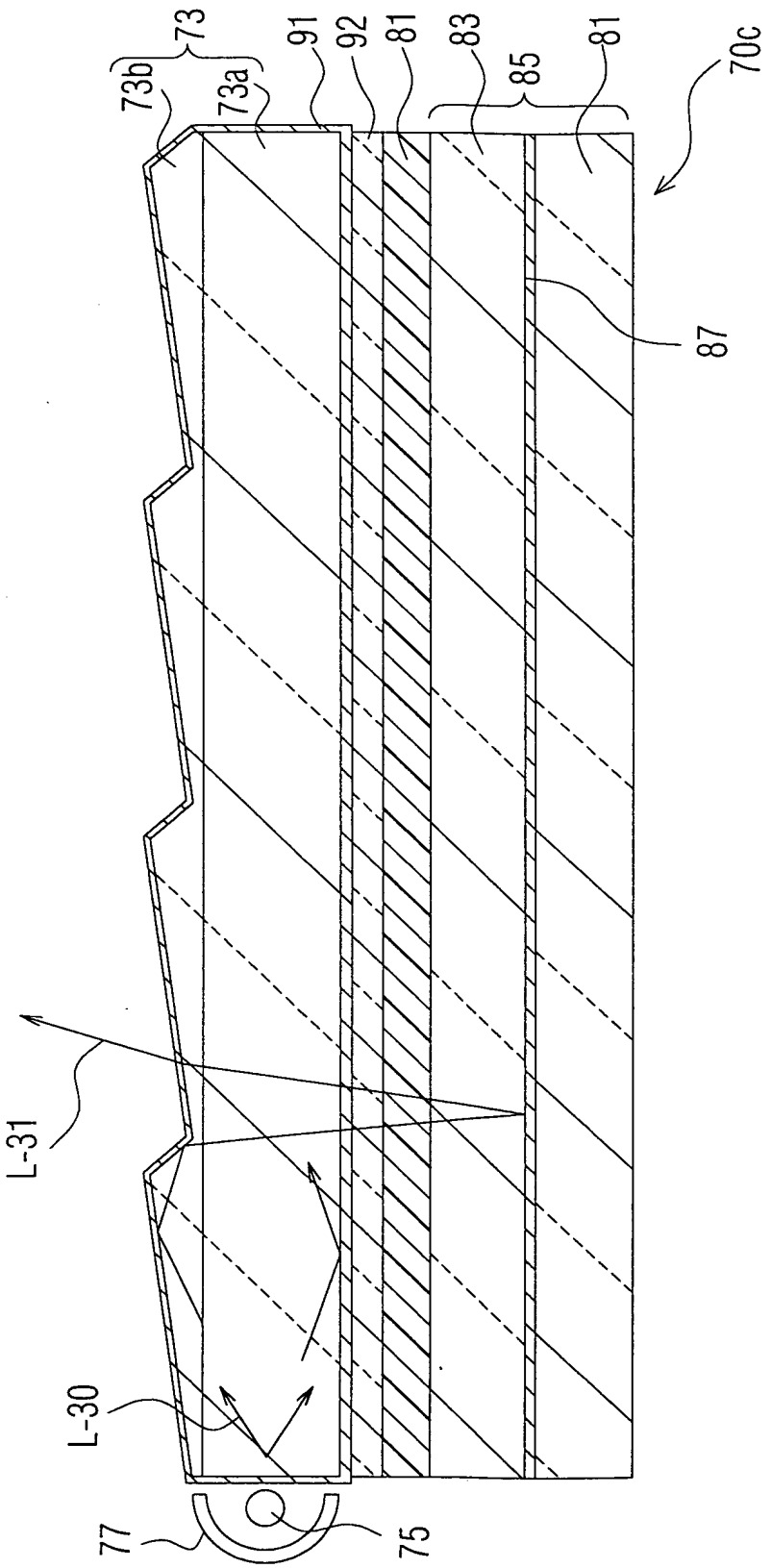


FIG. 15

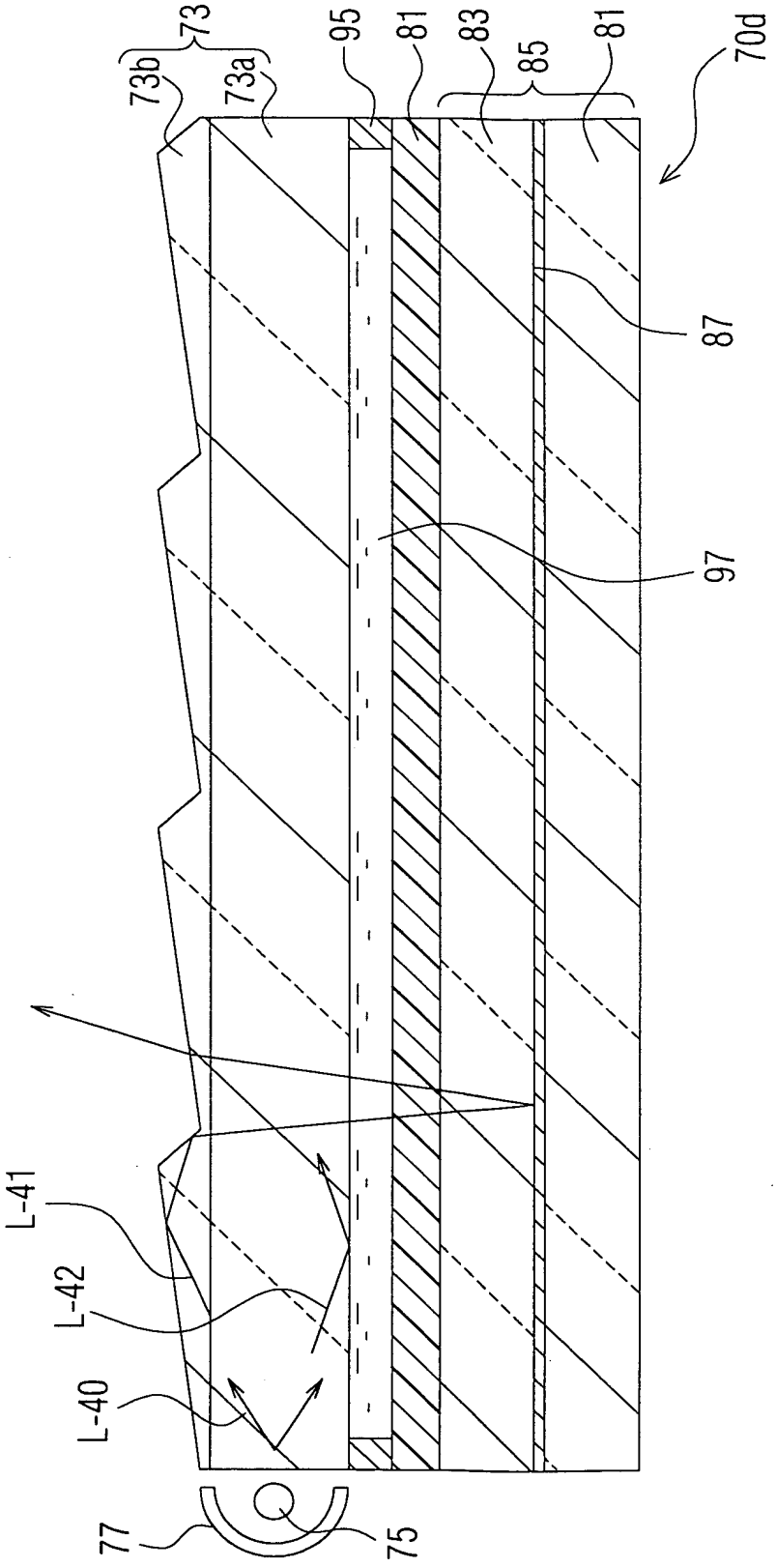


FIG. 16

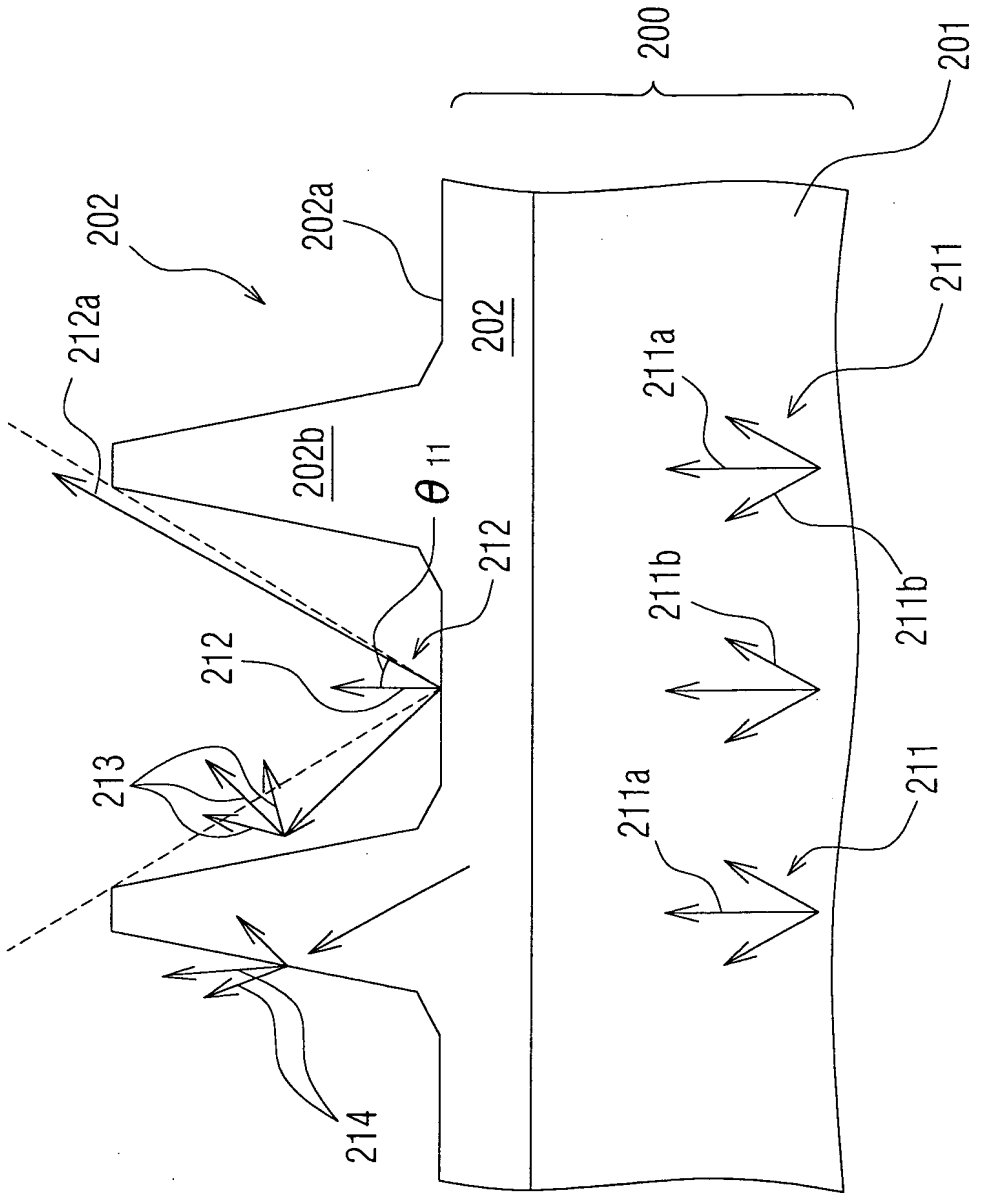

200
201
202
202a
212a
202
211
211a
202b
θ11
212
211b
212
211b
211a
213
211
214

FIG. 17

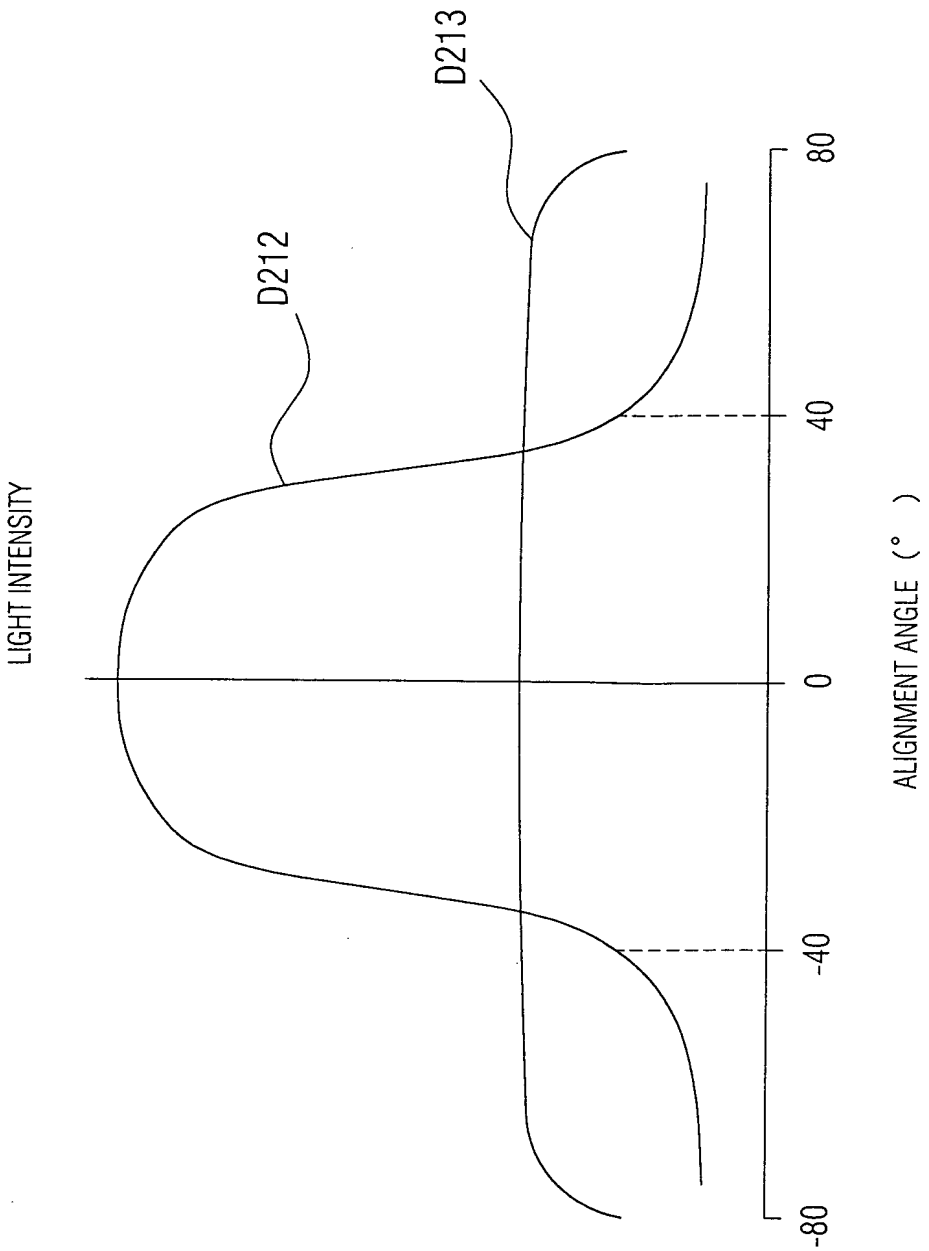


FIG. 18

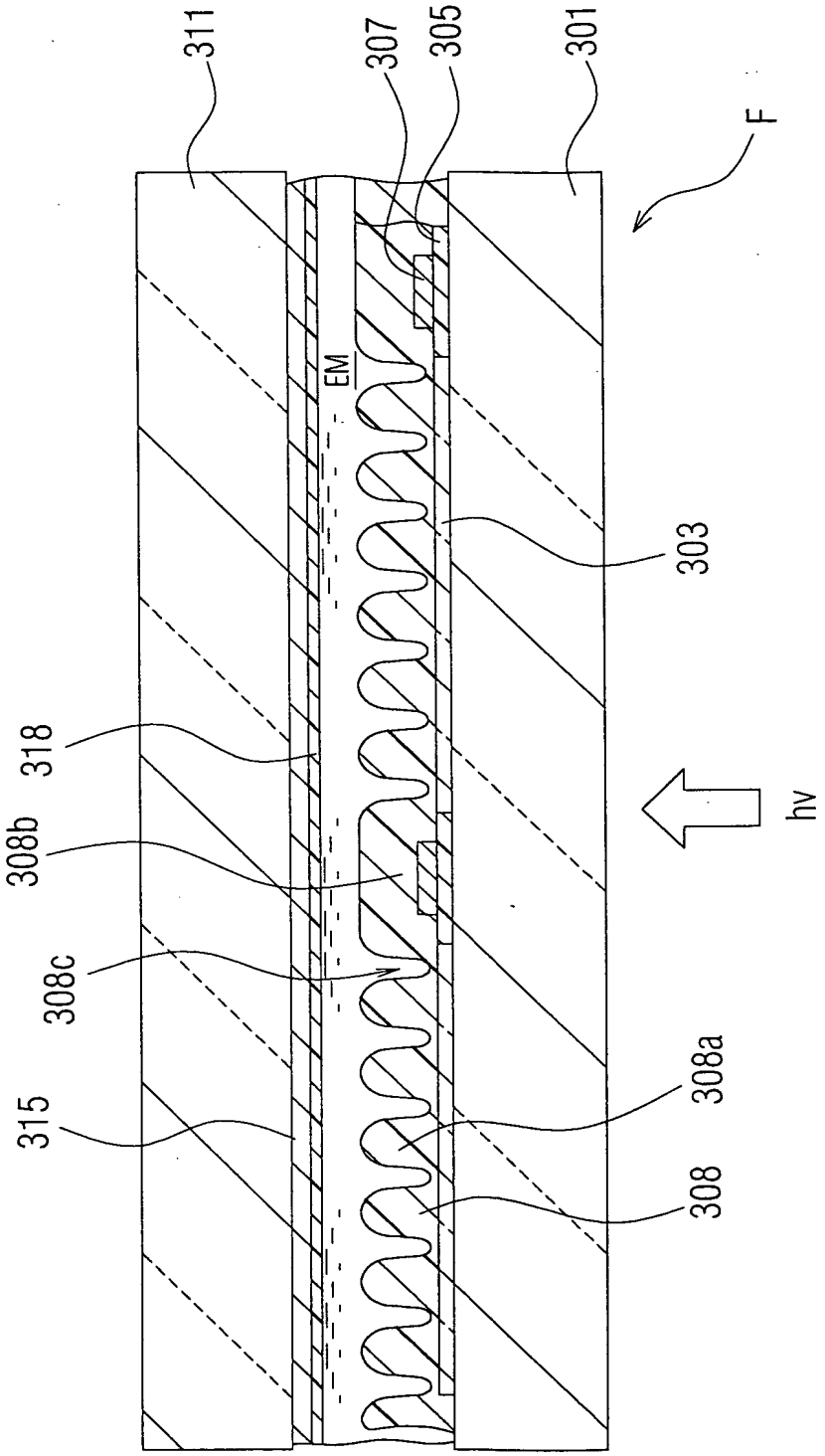


FIG. 19A

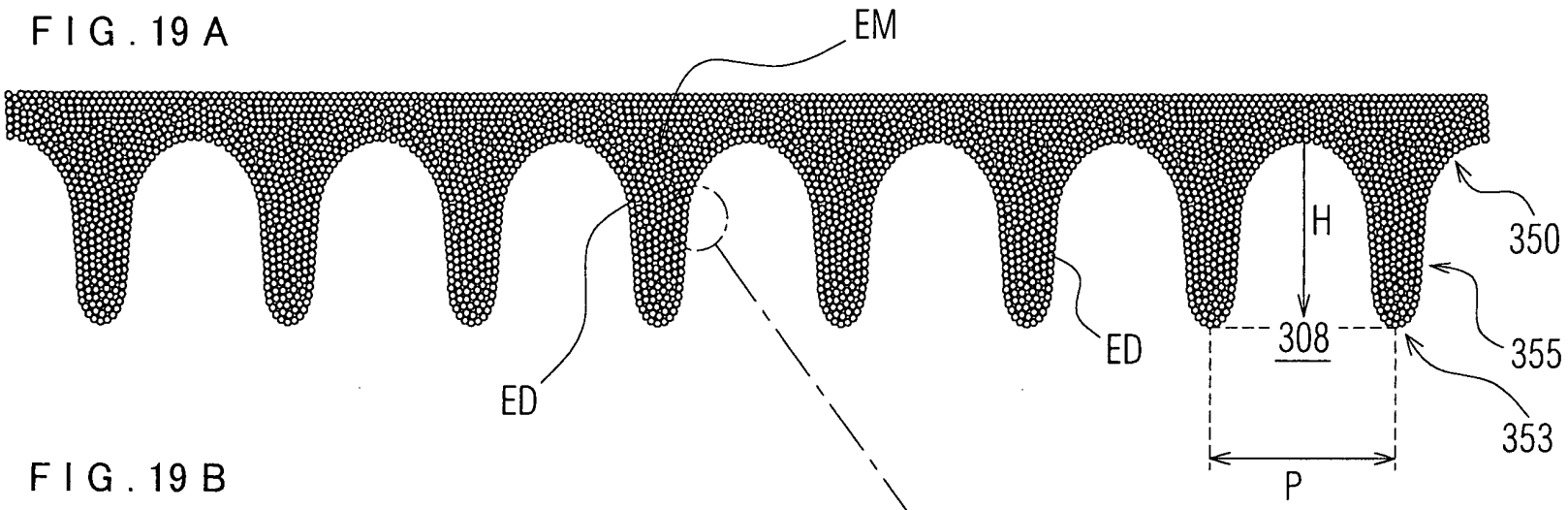


FIG. 19B

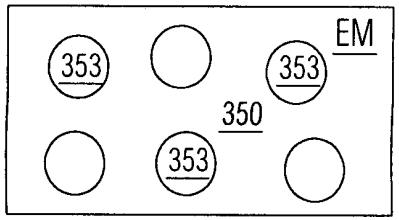
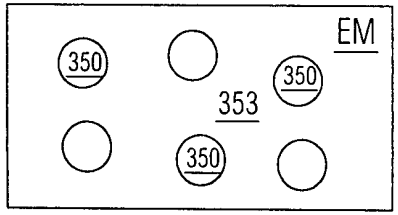


FIG. 19C



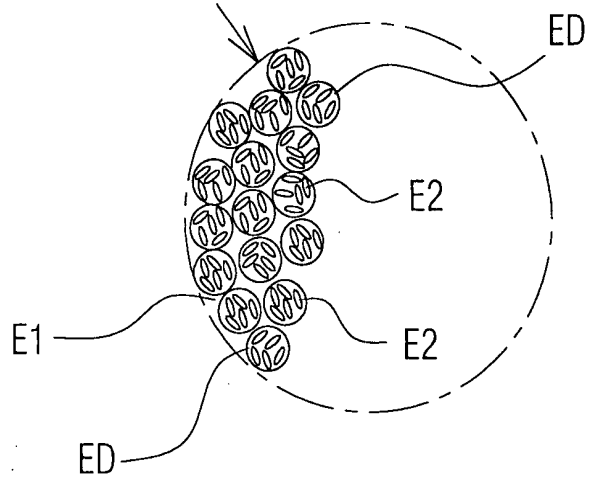


FIG. 20

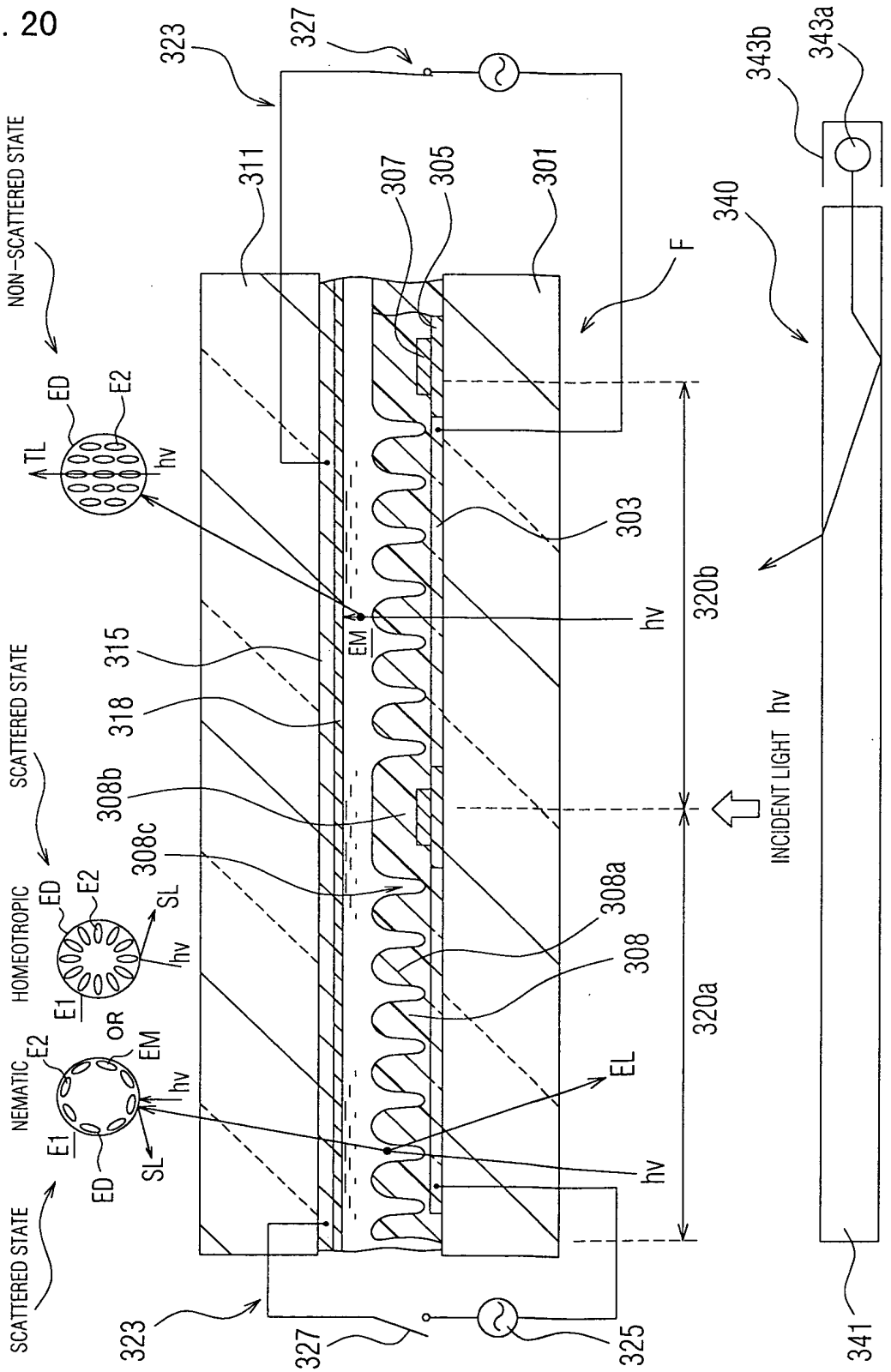

NON-SCATTERED STATE
SCATTERED STATE
HOMEOTROPIC
NEMATIC
OR
SCATTERED STATE
TL
ED
E2
hv
E1
EM
SL
323
327
311
307
305
301
340
343b
343a
F
303
315
318
308b
308c
308a
308
320b
320a
EL
INCIDENT LIGHT hv
325
341

FIG. 21

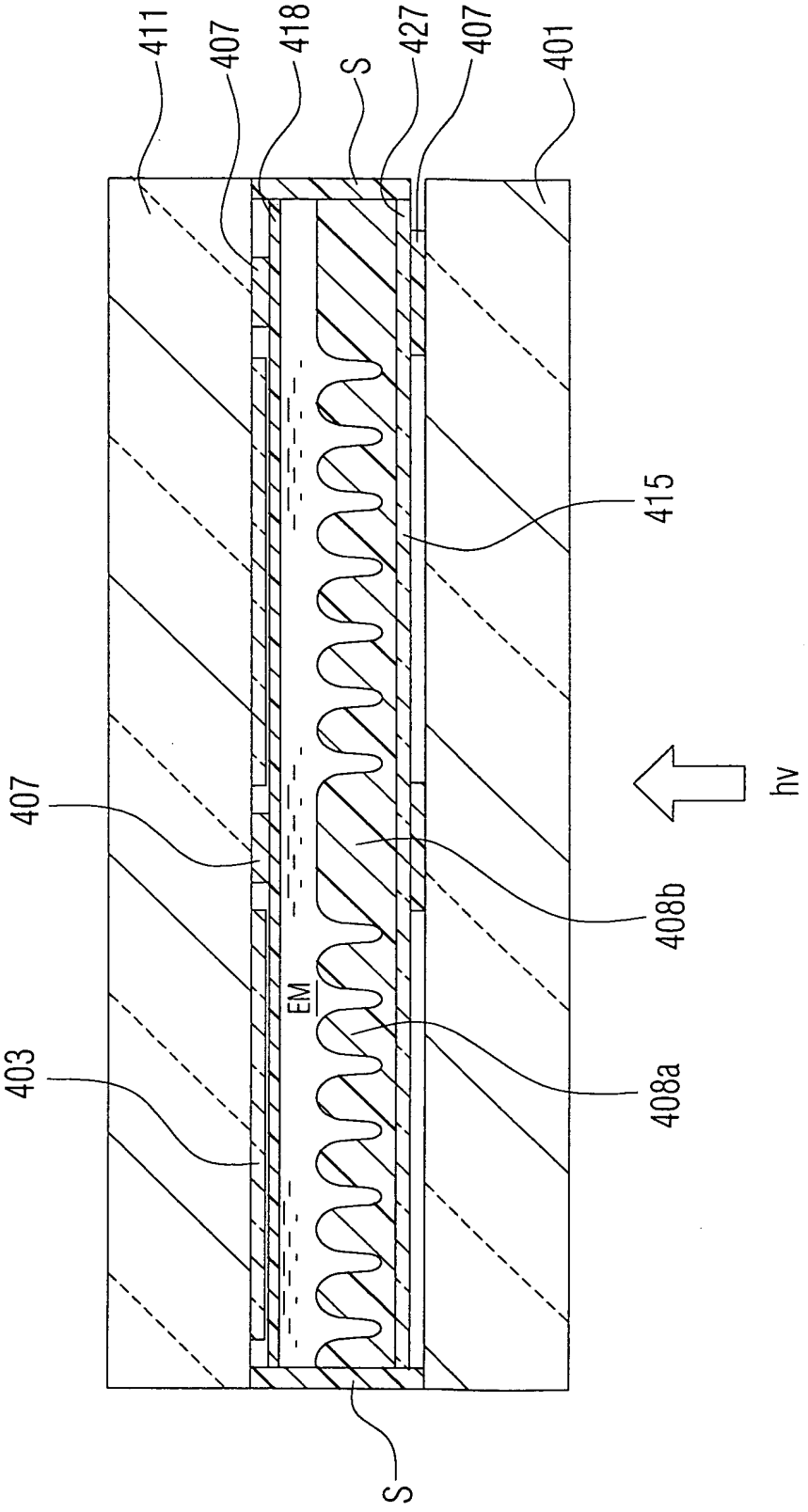


FIG. 22

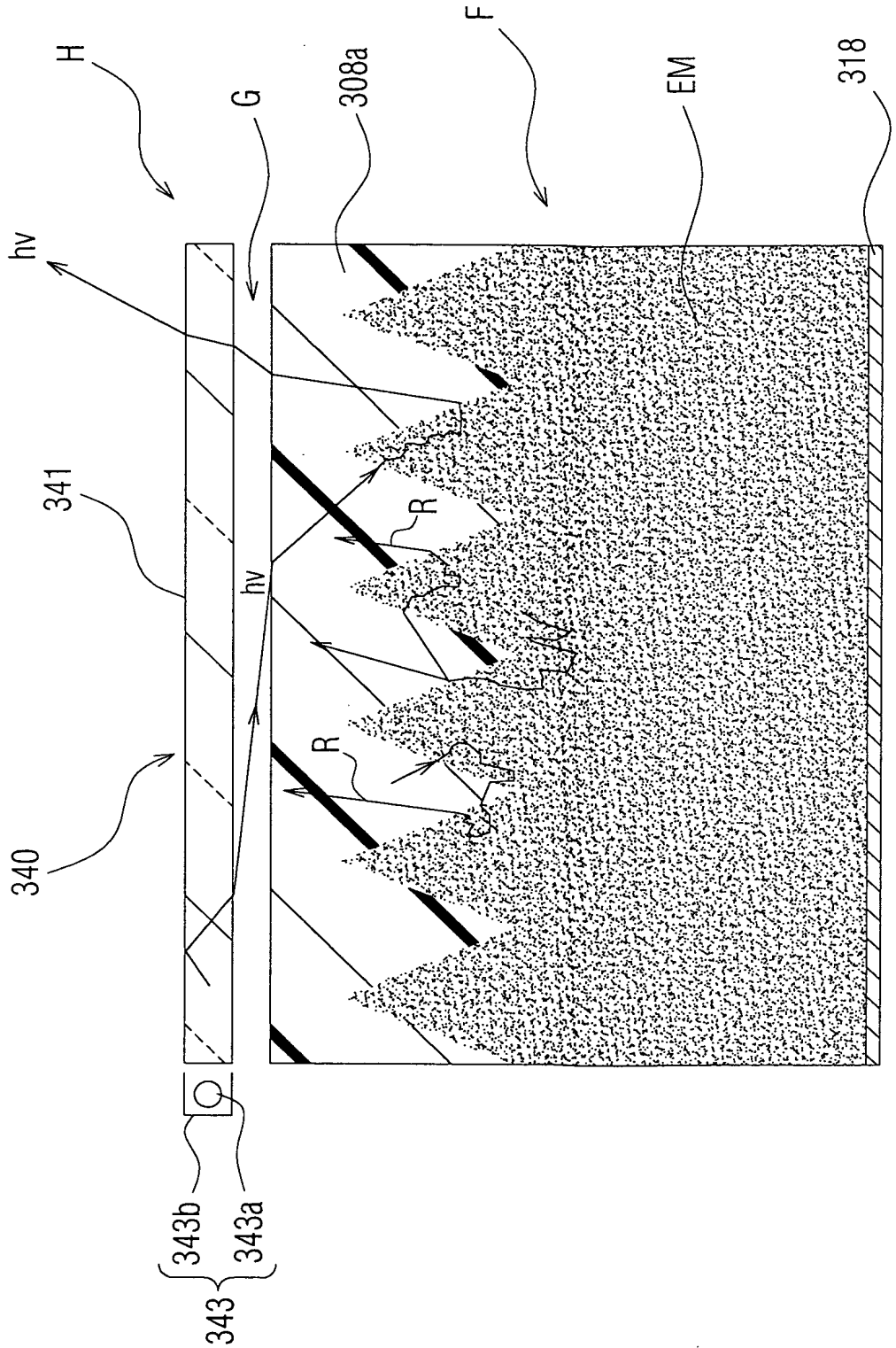


FIG. 23 A

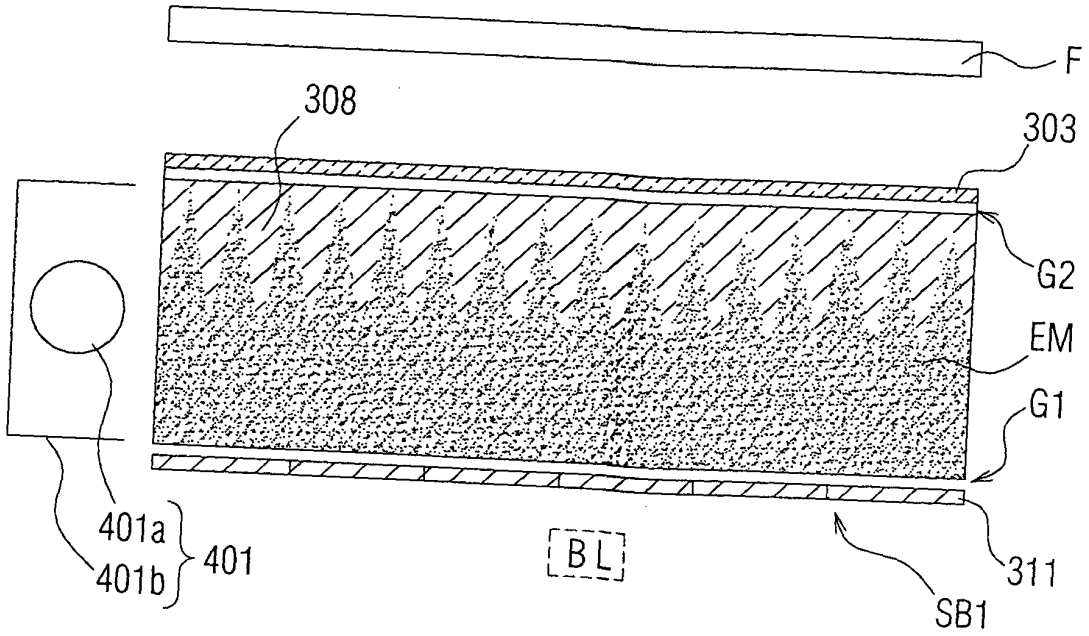


FIG. 23 B

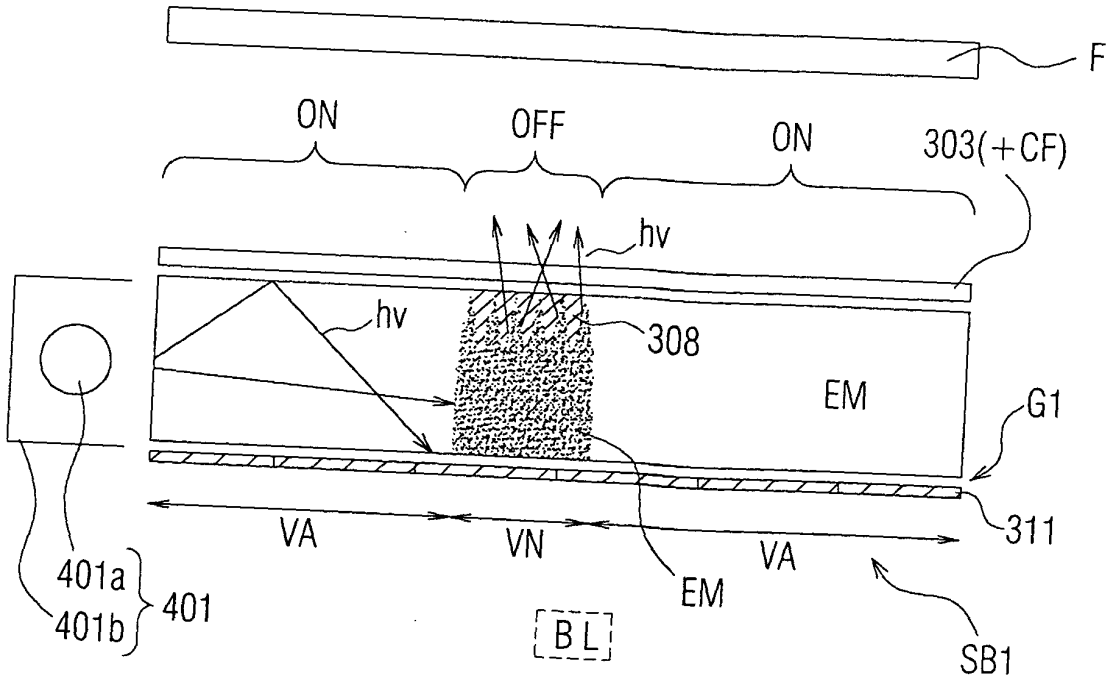


FIG. 24

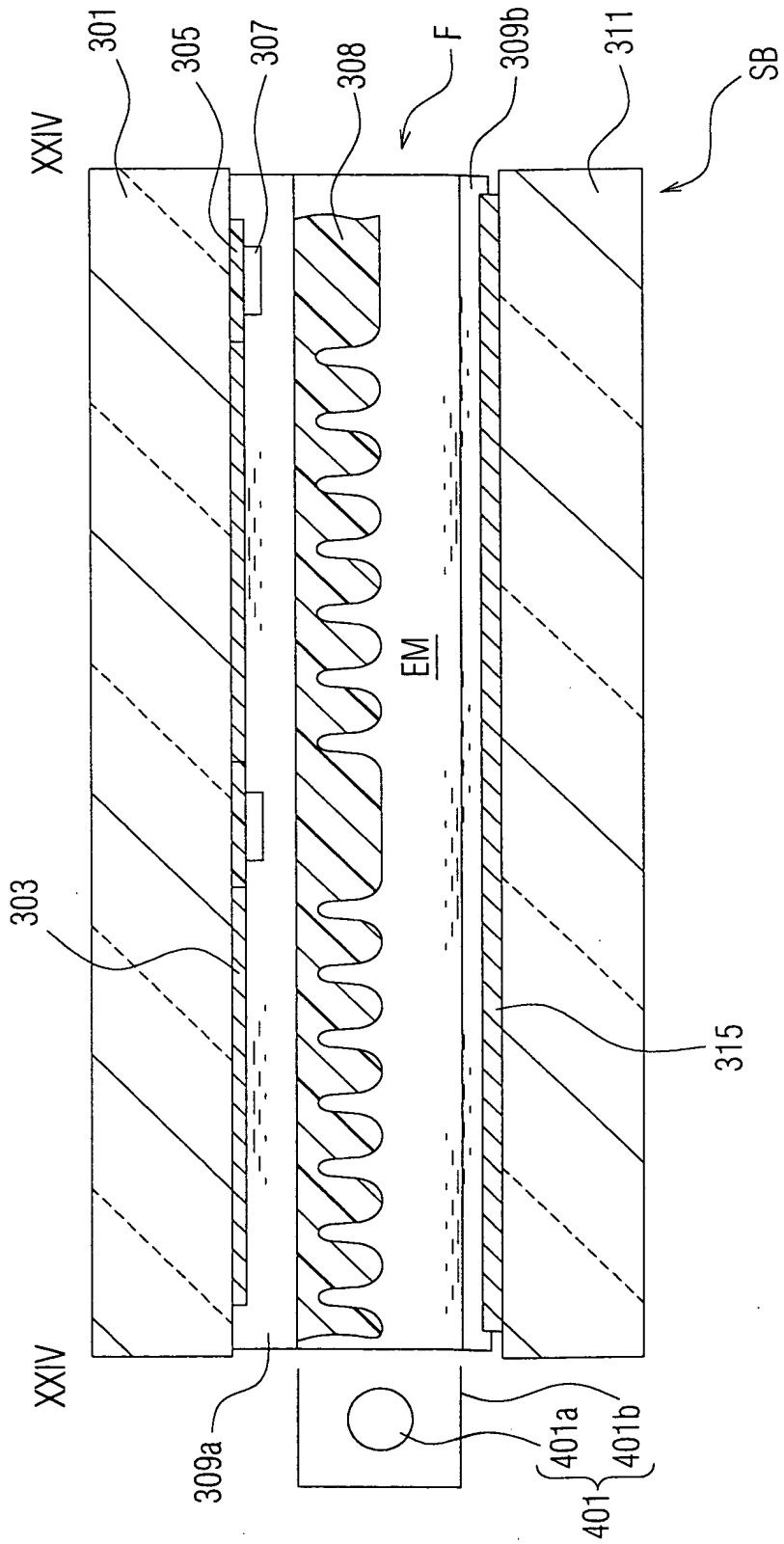

301
305
307
308
F
309b
311
SB
XXIV
XXIV
EM
303
315
309a
401a
401b
401

FIG. 25

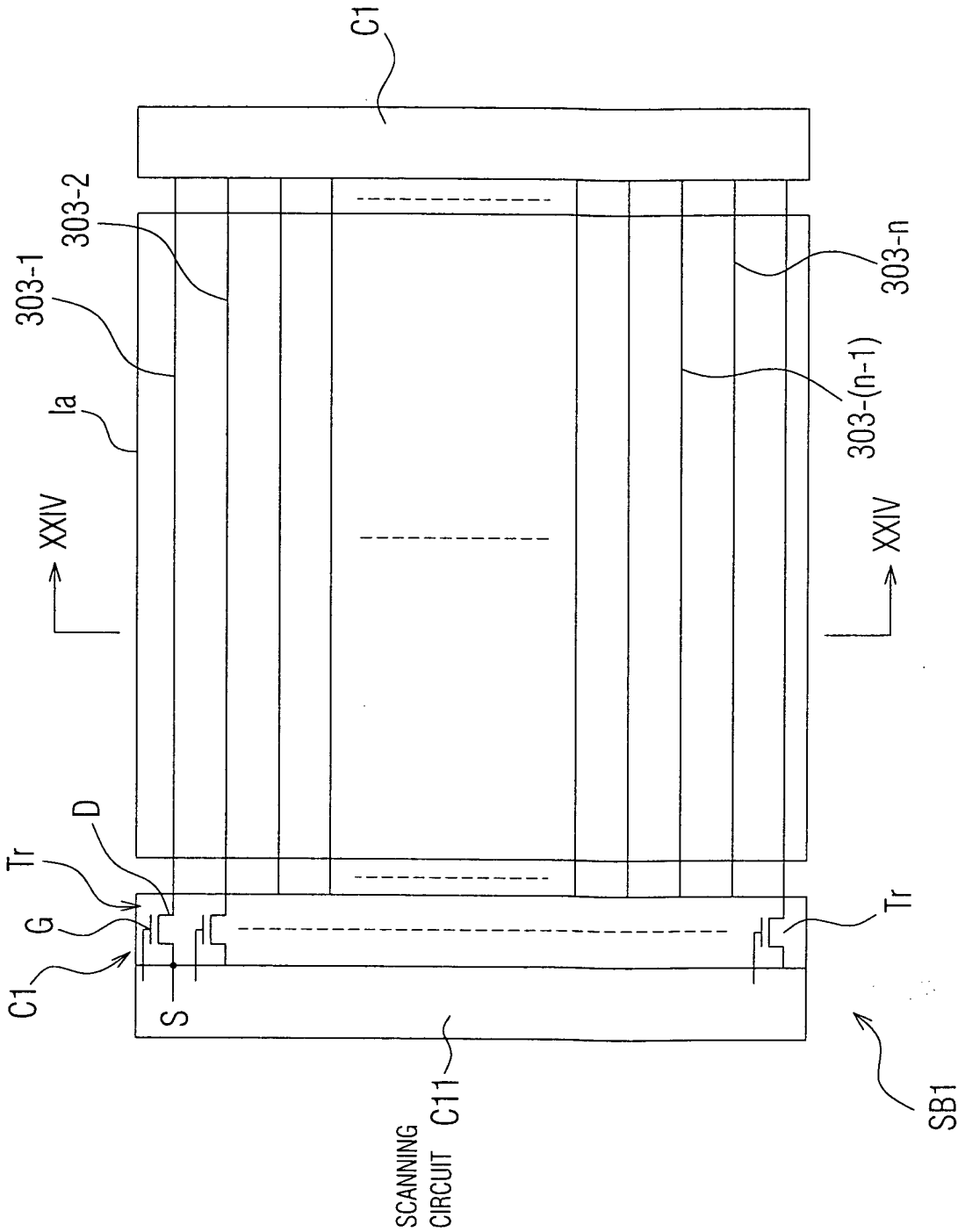

C1
303-2
303-1
303-n
303-(n-1)
Ia
XXIV
XXIV
D
Tr
G
C1
S
Tr
SCANNING CIRCUIT C11
SB1

FIG. 26

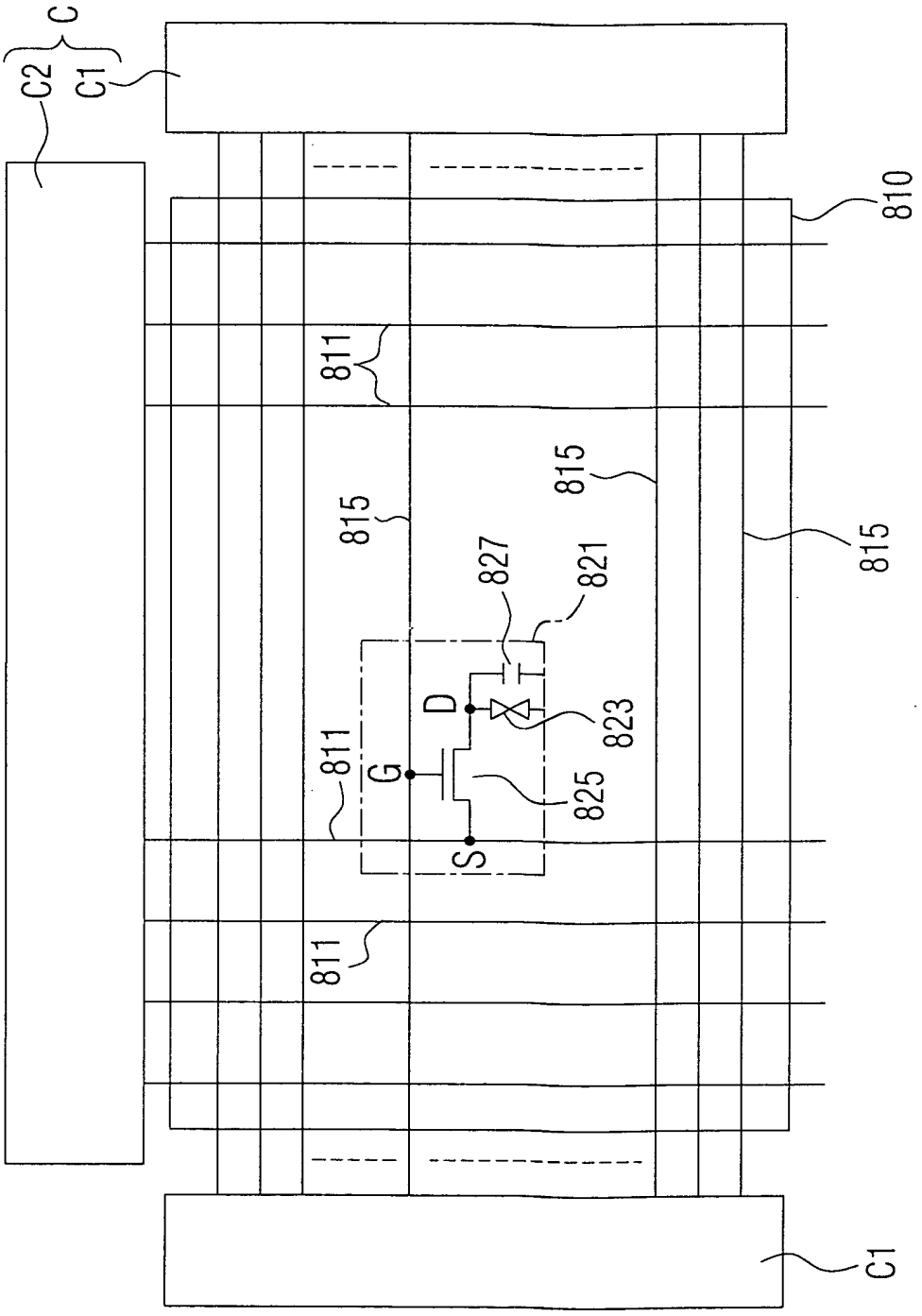
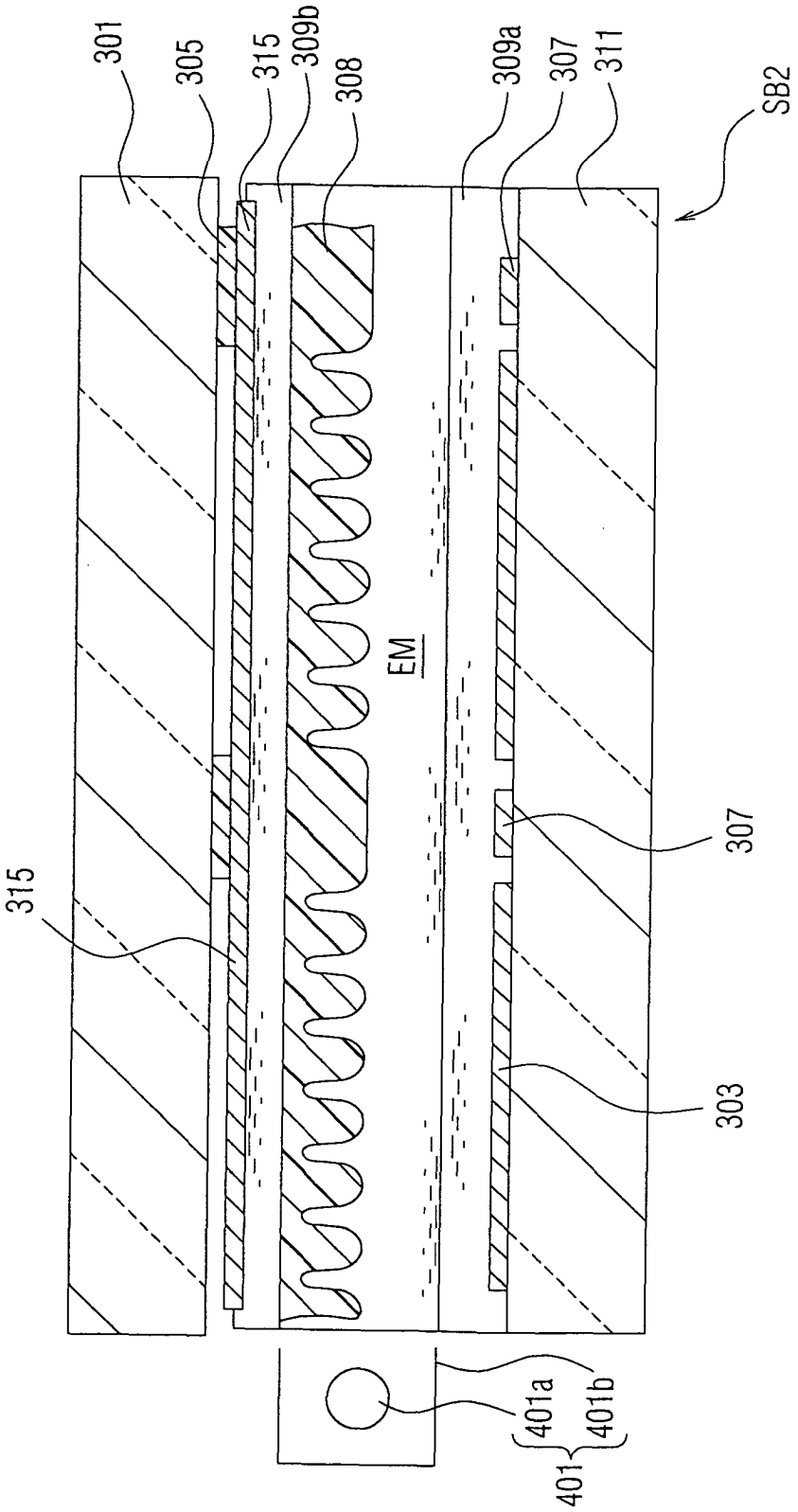


FIG. 27


301
305
315
309b
308
309a
307
311
SB2
EM
315
307
303
401a
401b
401